

AD 644241

SIX DEMONSTRATIONS OF
THE AGILE/COIN GAME

CLEARINGHOUSE FOR FEDERAL SCIENTIFIC AND TECHNICAL INFORMATION			
Hardcopy	Microfiche		
\$300	165	137	PP
1 ARCHIVE COPY			

Prepared by

ABT ASSOCIATES INC.
14 Concord Lane
Cambridge, Massachusetts

A Report to

THE ADVANCED RESEARCH PROJECTS AGENCY
The Pentagon
Washington, D. C.

Contract Number DA 49-083 OSA 3062

Project AGILE

ARPA Order Number 681

October, 1966

JAN 8 1967
RECEIVED
D

AVAILABILITY NOTICE

Distribution of this document is Unlimited

SIX DEMONSTRATIONS OF
THE AGILE/COIN GAME

Prepared by

ABT ASSOCIATES INC.
14 Concord Lane
Cambridge, Massachusetts

A Report to

THE ADVANCED RESEARCH PROJECTS AGENCY
The Pentagon
Washington, D.C.

Contract Number DA 49-083 OSA 3062

Project AGILE

ARPA Order Number 681

October, 1966

PREFACE

This document reports on the experience of Abt Associates Inc. in demonstrating the AGILE-COIN game at six institutions specified by the Advanced Research Projects Agency of the Department of Defense. The six demonstration exercises were staged between September 1965 and February 1966 at the following locations:

- 1) Institute for Defense Analyses, Washington, D.C.
- 2) Agency for International Development, Washington, D.C.
- 3) The Infantry School, Fort Benning, Georgia
- 4) Mobile Command Hq., Montreal, Canada
- 5) Air Force Academy, Colorado Springs, Colorado
- 6) U.S. Naval Post-Graduate School, Monterey, California

The members of Abt Associates Inc. staff who administered the demonstration exercises remain extremely grateful to their hosts at all of these institutions for their warm hospitality and for the facilities so generously provided. We also owe a debt of gratitude to our project officer at the Advanced Research Projects Agency, Lt. Frank Boice, who made all the necessary arrangements for the demonstrations, and participated in the games as a member of the Control team.

The development and test play of the AGILE-COIN game has been published in a previous report entitled, Counter-Insurgency Game Design, Feasibility and Evaluation Study, dated November 1965, DDC #AD475846.

SIX DEMONSTRATIONS OF
THE AGILE/COIN GAME

Table of Contents

	<u>Page</u>
PREFACE	i
1. Introduction	1
2. Observations	8
3. Learning Outcomes	11
4. Critiques	13
5. Revisions	15
APPENDIX 1: AGILE/COIN Game Materials	follows page 16
APPENDIX 2: AGILE/COIN Demonstration Exercises	follows page 1-27


1. INTRODUCTION

The study of insurgency involves the consideration of a great many complicated variables interacting with each other. The set of complex relationships which make up the insurgency "process" cannot be investigated satisfactorily within the framework of traditional "literary" exposition. At the same time, we have insufficient knowledge adequately to describe the variables in quantitative or logical terms, and proceed directly to mathematical solution.

In circumstances where a process so little-understood and so complex is to be analyzed, it is often fruitful to proceed by means of modeling and simulation. A model is a simplified representation of a process (usually a complicated process), while in strict terms a simulation is the exercise or operation of the model. By these definitions a simulation presupposes the existence of a model, and implies that the model's variables are given particular (though not necessarily precisely known) values for the purpose. The model may be exercised, that is the simulation may be carried out, using human players (a manual game), or an electronic computer (a computer simulation), or a combination of both (a man-machine game).

The great advantage of modeling and simulation lies in the user's ability to manipulate the relationships he is examining--to change the "inputs" and see what happens to the "outputs" of the model. The technique provides a vehicle to assist the transition from the qualitative to the quantitative, and from subjective impressions to objective analysis. It permits the consideration of a dynamic process as an integrated whole, whereas separate examination of each element might suggest a totally misleading picture of the overall process.

These capacities give the technique a special usefulness in attempting the study of insurgency--a study whose objectives, like those of any applied research, are theory-building, prediction, and control. Clearly the insurgency process involves an intricate web of political, military, and economic factors, whose parameters and interactions are known intermittently and imprecisely at best. The development of a model and ultimately a computer simulation would enable hypotheses to be tested, while at the same time indicating the relative significance of various relationships and therefore the most important gaps in the availability of data on the problem.



For all these reasons, the Advanced Research Projects Agency commissioned a study to determine the feasibility of a computer simulation of some of the major factors present in the early phases of internal revolutionary conflict. The most cost-effective method of developing a computer simulation of this nature, where very little quantitative information is initially available, is to design and develop a manual game as the first step.

The manual game clarifies the relative importance of variables and their structural relationships in the course of successive plays, and provides information useful in specifying weighting factors for the computer simulation. It helps in the development of theory, suggesting hypotheses for test, and testing them. It assists the identification of data requirements, and stimulates direct insights into the problem under analysis. The technique naturally has its limitations also. The presence of human players making decisions introduces a host of behavioral variables, which are extremely hard to control even when they are identifiable. Players bring with them to the game a wide variety of preconceptions and expectations, and once within the game they are differentially motivated by competition and conflict. But the advantages to be gained far outweigh these limits on the technique's usefulness, particularly if the latter are clearly recognized and discounted for in interpreting results.

Accordingly, the initial step in developing a computer simulation of the insurgency process was the design of a manual game ~~which came to be~~ known as the AGILE-COIN game. Three aspects of insurgency were selected to form the special focus of the game--loyalty, information, and force. Examination of some twenty case histories suggested that these were the principal variables in the early (or terror) phase of insurgency, and investigation of these aspects seemed also to offer the best match between methodological capabilities and current research requirements. —————> fo f '1

There are three groups of players in the game--Villagers, Government forces, and Insurgent forces--who interact with one another in terms of loyalty declared, information transmitted, and the exercise (or threat) of violence. Each group has a different set of objectives, and each starts the game with a different amount of information. The interactions between the groups are observed and recorded by a Control team, and subsequently analyzed and interpreted.

Sets of rules and other game materials are attached in Appendix 1, but it may be useful here to sketch out the dimensions of the game very briefly.

1. In a twenty-player game there are usually three villages of three men each, three men on the Insurgent team, six on the Government team (three Village Administrators and three central government players), and two messengers. The number of villages, or the number of men per team can be expanded or contracted, though this will clearly change a number of other variables at the same time.
2. Each village, and each of the two belligerent teams is housed in its own room--village teams may not leave their rooms, nor may they communicate with anyone outside the room except by written message.
3. Each village starts the game with a population of 100 men, represented by plastic chips of a certain color for each village. The 100 chips are divided among the villagers, each villager maintaining control of his population group.
4. The Insurgents start the game with between 50 and 100 armed cadre (represented by red chips), while the Government starts with between 150 and 200 armed men (represented by blue chips).
5. The game proceeds in a sequence of ten-minute periods representing successive days and nights. During the daytime only the Government team may move about and visit the villages, while during the nighttime only the Insurgents may do so. The Insurgents also have the possibility of attacking Government headquarters.
6. At the end of each 24 hour cycle (every twenty minutes in elapsed time), each villager submits privately to the Control team a slip on which he notes various data about his population group, including his loyalty as between Government, Neutral, and Insurgent.

7. During their visits to the villages, each of the belligerents tries to gain the loyalty of the villagers while at the same time improving his military position. The latter he may do by recruiting or impressing men to increase his fighting strength, and by leaving ambush forces in the villages to attack the other belligerent's visiting forces.

8. When a belligerent visits a village, he must commit a certain number of his forces, which cannot be used again during the same 24 hour cycle. The villagers have an opportunity to warn the incoming belligerent of an ambush, but once he has decided to enter, his forces are automatically engaged with any of the opposing forces that may have been left in the village.

9. Casualties are calculated by the Control team according to a formula which takes into account the ratio of the force sizes and the degree of surprise involved. Losses of village population (from crossfire) are also calculated. Chips are removed by Control appropriately.

10. Within this framework, the winning village is the one with the largest remaining population which has declared its loyalty to the winning belligerent; the win criteria for the belligerents are defined in terms of acquiring the loyalty of specified proportions of the population while significantly reducing the opponent's military strength (the precise win criteria are not the same for both belligerents, nor are they known to all the players).

It must be stressed that the game structure is in no sense intended as a total simulation of the whole insurgency process. It is designed to explore one kind of "terror" phase in insurgency--the transition from Mao's "Phase I" to "Phase II", expressible as the transition from subversion to guerrilla warfare. As such, the terror phase incorporates some aspects of both subversion and guerrilla warfare. Persuasion and coercion are used to gain information and recruits in villages. Selective terroristic killing of government administrators and hostile villagers is practiced by the insurgents. Villages may harbor spies and informers, for one or both sides are poorly informed on the general war situation. The forces of both sides threaten and cajole and recruit, they are sometimes ambushed, and they attempt to surprise their opponent. The larger an ambush is, and the longer it stays in place, the greater the probability of its being betrayed. Secure ambushes provide force effectiveness advantages, but betrayed ambushes incur force effectiveness penalties.

The game specifically excludes such economic factors as food control, civic action, and bribery--all important factors in some real-world cases. The deliberate intent is to concentrate on those relatively more simple (but still very complex) situations where economic factors did not play a major role. Communication among villages is possible, but somewhat delayed and unreliable, as might be the case in specifically rural insurgency. The insurgents cannot compete openly and directly for political loyalty in the presence of government forces--they have become wanted revolutionaries, have gone underground and become outlaws. The government forces, on the other hand, cannot find or attack any fixed center of revolutionary occupancy, as they might attack a "front" organization in the pre-violent political organization stage.

Even within its concentration on the terror-phase transition from subversion to guerrilla warfare, only some of the salient situations can be dealt with. Ambushes and patrols along roads between villages or in open country are excluded, to focus action on village intelligence and loyalties. There is no air support that comes in time to relieve an ambushed government force. And

there is assumed to be no shortage of arms among insurgents. In short, the game concentrates on the variables of loyalty, information, and direct application of force, at the cost of excluding some other important factors. This appeared to be a necessary simplification for the exercising of a manual game with sufficient frequency for the identification of decision rules for the planned computer simulation.

The AGILE-COIN game was developed over a period of several months--that is to say, the game was played, criticized, revised, and played again. The history of the game's development is reported elsewhere,¹ but it involved the participation as players of many who had had direct field experience of counter-insurgency operations, and also many who were deeply interested but were without personal experience of the situation. The comments of both types of player strongly suggested that the game had high potential value as a teaching or training device. Those with field experience confirmed that the interactions and crosspressures were realistic, and those without experience remarked on how vividly the game had involved them in situations they had read about, but had never previously felt.

This reaction was widely enough shared that the Advanced Research Projects Agency decided to demonstrate the game as a teaching or training device to a number of military institutions which expressed interest. As a result, the game was demonstrated in six different locations between September 1965 and February, 1966:

1. September 26, 1965: Institute for Defense Analyses, Washington, D. C. (1 game)
2. October 21 and 22, 1965: The Infantry School, Fort Benning, Georgia (2 games)
3. October 28, 1965: Agency for International Development, Washington, D. C. (1 game)

¹ See Abt Associates Inc., Counterinsurgency Game Design Feasibility and Evaluation Study (November 1965), prepared for the Advanced Research Projects Agency and designated AD 475846 by the Defense Documentation Center.

4. January 17, 18, 19, 1966: Mobile Command Headquarters, Montreal, Canada (3 games)
5. January 26, 1966: U.S. Air Force Academy, Colorado Springs, Colorado (2 games)
6. February 23, 24, 25, 1966: U.S. Naval Post-Graduate School, Monterey, California (3 games)

In all 12 of these games, players were personnel of the institution in question, while the Control team was composed of "outsiders" familiar with the game and its design.

1-2
is given
This document constitutes a report on the six demonstrations of the AGILE-COIN game. It should be clear from the outset that the game was not played in identical versions on all of these occasions. Modifications have been introduced throughout the series as was thought necessary (and often as a result of players' critiques), though none of them has radically altered the game. Another variable has inevitably been the physical facilities employed, which have been different from game to game. Variations of this kind may affect the pattern and nature of communications. For example, a village tends to be ignored if its room is "off the beaten track" for either belligerent. This finding may in itself be significant--the point made here is that this factor has been arbitrary rather than controlled. The games, therefore, should not be viewed as being identical sessions using different players each time. The result of each game is much more significant in terms of that particular game than it is in terms of the series as a whole.

Section 2 of the report contains the major observations of the designers on the outcomes of the games played. In Section 3, the usefulness of the game as a teaching or training device is discussed. Section 4 reviews the critiques written by the game's players on different occasions, and Section 5 outlines the revisions adopted, partially at least in consequence of the critiques. *are reviewed*

2. OBSERVATIONS

The observations discussed in this section are derived from records kept during play and from subjective impressions of observers. As a practical matter, "observers" in this sense have invariably been members of the Control team, who have after each demonstration reviewed and rewritten the game records, and noted down their comments on that play of the game. Obviously the kind of things which the control team observes depends on where they are physically located during play, and this was changed quite radically between the third and fourth demonstrations. For the first three demonstrations, two members of the Control team accompanied each belligerent team successively on its "rounds"--the belligerents being constrained to visit only one village at a time. The other members of the Control team had the tasks of collecting loyalty slips from the villages, and keeping central records about village population and loyalty. The Control team members who traveled with each belligerent in turn kept records of visits and engagements, and were of course able to hear the belligerents' interactions with the villagers, so that they gained a good overall picture of the general strategy of both sides. On the other hand there was no observation of interactions within the village once the belligerent had left.

In the last two demonstrations, a Control team member stayed throughout the game in each village, while the belligerent teams were free to move about as they wished during the appropriate period. One member of the Control team kept central records of village loyalty and belligerent casualties. Using this operational framework there is little opportunity to gain a comprehensive picture of the belligerent strategies, but each of the villages is kept under fairly detailed observation throughout the game. Since our main focus of attention has been on village loyalty, this modification represents an advantage even though it changes in some degree the recorded aspects of the game.

Appendix 2 contains a full set of records , commentary, and a critique summary for each of the five demonstrations. The games did not, and were not expected to, produce any startling new insights or research findings to the designers. The games served to confirm many of the patterns established during the initial development period, which are discussed in detail elsewhere.² Loyalty shifts are associated primarily with the presence of belligerent forces in the village, the villagers normally perceiving forces as "protection" and shifting loyalty to their "protector". As the game progresses and engagements take place, the villagers suffer losses from crossfire and this reduces the desire to house belligerent forces in the village. On several occasions villagers were sufficiently committed to one side to provide recruits (though where veiled threats are used, the distinction between recruits and impressed men becomes vague). Impression or recruiting early in the game tends not to be as damaging to a belligerent as the same action later in the game. However belligerents tend to overestimate this negative effect, and sometimes their reluctance to impose upon the villagers is interpreted as weakness.

One particularly successful government strategy was to move a large ambush force very rapidly from village to village. Small insurgent probes were repeatedly wiped out by the ambushes, leading the insurgents greatly to overestimate government force strength and therefore to miscalculate in their strategy. In several of the games, the government team had considerable difficulty in organizing itself effectively, whereas the insurgents were typically fewer in number and more coordinated in operation.

The introduction of insurgent spies (usually one in the government team and one in one of the villagers) gave the insurgents a valuable weapon when they were able to establish an effective communication system. However, government policies were developed which proved fairly effective in dealing with this problem, such as always working in pairs or removing suspected villagers to government headquarters. Although a military

²Op.Cit. Counterinsurgency Game Design Feasibility and Evaluation Study.

advantage could often be gained, since less reliance needed to be placed on information volunteered by villagers, the problem of gaining loyalty still remained to the insurgents, and with one or two exceptions their spies found it difficult to change fellow villagers' loyalty.

There was some variation discernible between the performance of different groups of players. It would be misleading to draw any general conclusions from these differences, since a great many other factors also changed from demonstration to demonstration. Certain observations are perhaps worth comment, however--players with a military background tended to "get into" the game faster than others, presumably because they have been exposed to similar exercises previously; there was a slight tendency for village players with a military background to favor the government rather than the insurgents, other things being equal; when cadets and their instructors played together, the cadets were more impressed with the game as a training technique. While some people proved to be "good players" in a variety of roles, there was no apparent correlation between this factor and any other.

After several of the games players remarked on confusion arising from the rules, but did not specify particular features of the game which had created problems. Clearly the game ought not to be so confusing that the players are unable to participate, and this can be avoided by an adequate briefing session before the game. It should be remembered, however, that a major reason for setting up the exercise in the first place is to give players an awareness of certain problems and processes with which they are initially not familiar. At the beginning of the game players are not sure what is going to happen, and they naturally refer to the rules or to the Control team for clarification. They do not find the answers they seek, and tend to write this off as a fault in the game rules. In fact their confusion is related to their unfamiliarity with the process, and clarification should arise from their participation in the game. Along these lines, some players have commented that, although the rules were confusing, this was a necessary and desirable aspect of the game. This argument does not, of course, excuse confusion arising over mechanical aspects of the game, such as the length of move cycles, which must be clearly explained to the players.

3. LEARNING OUTCOMES

The AGILE-COIN game was demonstrated as a potentially valuable training device. Its usefulness in fulfilling this function has been assessed only in terms of the subjective impressions of the players. There has been no attempt to follow the exercise with objective tests of the players' understanding of either the game itself or the process it simulates. Nor has there been any followup program to assess possible long-term effects of the game on players' attitudes toward this or similar problems. The learning outcomes reported here are those which have been self-assessed by the players and recorded on their critique sheets after the games.

It can be said immediately that most players found the game a stimulating and valuable experience. A small number thought the exercise was quite without value, and even fewer had ambivalent feelings. Critique forms for the first two demonstrations asked a specific question on what the player had learned from the game, but answers to this question were indirect, did not mesh well with answers given elsewhere by the same respondent, and generally indicated a reluctance to accept that the game had taught them anything they had not already known. Partly this is a question of semantics. The game has the capacity to make extremely vivid a great number of complex interactions; players may appreciate the new light shed on an old problem without feeling that any "new facts" have been learned. They have nevertheless been through a learning process, and one which they themselves feel to have been beneficial.

The critique forms used in later demonstrations included questions on who would learn most from the game, what could be learned from repeated plays, and how the game compared with other training techniques. The most widely acknowledged learning outcome is an increased awareness of the enormous complexity of the insurgency process, and (at a much more concrete level) a feeling for the supreme importance of intelligence and communications in the field. Many players remarked that repeated observation would demonstrate the effects of alternative strategy choices, but this was projection rather

than actual experience in most cases. Other learning outcomes which have been mentioned include awareness of the importance of personal interactions, of the difficulties of villagers under cross-pressures, of the necessity to make quick decisions on inadequate information, and of the organizational problems of counterinsurgency.

It is noteworthy that the learning experience is very often described by players in terms of "increased awareness of ..." or "overriding importance of..." That is to say, the game does less to present wholly new material than to place in new perspective and indicate the relative importance of certain well known factors. This result is partly a function of the fact that many of the players were officers who had a thorough theoretical knowledge of insurgency, and many more had actual field experience. This result also confirms the original reasoning behind the model development effort--that primary attention should focus not on the various individual factors present in an insurgency situation, but on the complex interrelationships between all these factors in the framework of the total insurgency process.

One further indicator of the game's value as a teaching device can be found from the respondents' comparisons of the game with other training techniques. Of 96 respondents to this question, over one-third (35) indicated that they had no basis for comparison or did not want to make a judgment. Of the remaining 61, 40 found the game better, 15 found it comparable, and 6 found it worse than other techniques. It is perhaps significant that if the two establishments specifically oriented toward training junior personnel are considered separately, only 5 out of 46 responses were in the "don't know" category, while 31 of the remaining 41 players thought the game better than other techniques.

In the context of the game's capacity for teaching, it is most important to stress the value of an effective "debriefing" session after the game. It is at this session that players may become aware of the differences between their own perception of events and other peoples' perceptions of the same events; they are able to evaluate and discuss various techniques applied and decisions made by different participants in the exercise; they can perceive the reasons for previously unexplained actions; and in discussing the accuracy and the distortion implicit in the simulation, they can gain a better understanding of the complex problems of the real situation.

4. CRITIQUES

After each demonstration exercise, the participants were asked to fill out critique forms. The form was changed slightly between the second and third demonstrations, but otherwise was the same throughout the series. Some of the responses have already been discussed, in the sections above on Observations and Learning Outcomes. A great deal of further information is contained in the Summary of Critiques for each demonstration, which will be found in Appendix 2.

The players' critique forms have been of great assistance to the designers in their efforts to refine and improve the game. In some cases, of course, players suggest revisions which have already been considered and rejected, such as the inclusion of economic factors or the possibility of putting players totally out of the game. But valuable new suggestions equally often emerge, and several of them have been implemented in succeeding games. Some of these revisions are discussed in Section 5 below.

One aspect of the game which has continued to stir debate is the calculation of casualties. The method used has been the same throughout the series, although a number of different ways of presenting the calculation have been tried. The latest formulation is included in Appendix 1. but it is worth discussing the matter briefly here. Two possible types of military encounter are postulated, the surprise case (where only one side has detailed knowledge of the coming engagement) and the no-surprise case (where both sides are equally informed or ignorant).

For the surprise case a graphical representation of the winner's losses of men has been developed on the basis of the Lanchester square laws, on the assumption that the critical force ratio (where the advantage of surprise is matched by the disadvantage of smaller force size) is one to three, and on the further assumption that the losing side always loses 80 percent of its committed force. For the no-surprise case it is assumed that the smaller force always loses, and similarly suffers 80 percent casualties; if both sides fight at equal effectiveness up to the point where the smaller has lost 80 percent of its men, the losses to the larger force (given certain simplifying assumptions) can very easily be determined. In its latest formulation, this

relationship is presented in a table from which the outcomes of engagements between various sizes of force can be read off. The local villagers also suffer casualties from crossfire during an engagement, and the number has been arbitrarily determined as one-fifth of the total number of men firing in the no-surprise case, reduced appropriately in the surprise case to take account of the shorter battle duration.

These proportions are not intended realistically to reproduce actual engagement outcomes in typical insurgency situations. The initial assumption that 80 percent of the losing force is killed is certainly exaggerated for the average case, although no doubt this casualty level might be sustained in particular battles. The high belligerent loss ratio is used primarily to speed up the action of the game and to allow the possibility of decisive military victory within the restricted time normally available for play.

Similarly the village crossfire losses are certainly too high--as experienced officers have pointed out, villagers become most adept at finding shelter during military engagements, and although a few may be killed, the numbers are by no means on the scale predicated in the game. In terms of the game situation, however, crossfire losses do not simply represent casualties suffered in engagements, but more generally the cost to a village of harboring forces of one side or the other, a cost to be offset against the benefits of protection. In the real insurgency situation the village is under considerable cross-pressures, and the use of a high crossfire casualty ratio serves to translate some of these pressures into factors which are operational in the game.*

This argument has not been spelled out in briefing the players or in the written rules, since it was considered important that the players themselves work out the costs and benefits of different policies as a result of their game experience--and in much the same way as they would have to in real life. The

* An alternate approach would be to limit the engagement by imposing a maximum loss rate on a superior attacker, in a non-ambush situation. This would simulate the attacker's general capability to break off an attack at the point when casualties become too high, even if an ultimate Pyrrhic victory is in sight. The inferior force's casualties as well as any village losses could be pro-rated by the ratio of the attacker's losses, limited by breakoff, to what his losses would be if the engagement were drawn to a finish. This technique was employed during the Canadian demonstration described below. It is quite feasible from a control point of view and may be incorporated into future plays of the game.

loss ratios have consequently been known only to the Control team at the start of the game. This problem of "how much to tell the players" is a general one, whose solution is more a matter of trial and error than of any sophisticated theoretical analysis. It appears that the game is fairly well balanced at this stage, in terms of how much is initially known to which players, but certainly this aspect could easily be adjusted.

5. REVISIONS

Partly as a result of the critiques by players, and partly because of new ideas of the designers, the game has been revised after almost every demonstration. Many of the important revisions have already been discussed in this report, and most of the minor mechanical refinements do not merit consideration here. There remain a number of changes in procedure or rules which deserve mention, together with one or two suggested, but as yet unadopted, further revisions.

In the earlier demonstrations, players had no advance information on the game, and were forced to start playing on the basis of an oral briefing plus whatever reading of the rules they could manage before the game and even during it. This was admittedly not a matter of choice, but a function of the particular arrangements made and the limited time available. For the last two demonstrations the written rules were distributed before the game, so that players had an opportunity to familiarize themselves with them in advance. The pre-game briefing session could then be better appreciated, and players could ask questions based on a much more thorough knowledge of the game's purpose and operations. Since players receive different sets of rules according to their roles in the game, the prior distribution of material requires prior decisions on "casting", but this problem is certainly not insurmountable.

The procedure for passing messages has changed somewhat from game to game, primarily as a function of the available facilities and personnel. Where enough people were available, there have been two messengers, one attached to each belligerent team. It has been found best to restrict movement by each messenger to the period during which his belligerent is free to move--that is, the insurgent messenger moves only at night, the government messenger

by day. Villagers have to take the consequences of their messages being scrutinized by one of the belligerents, though they can choose which one. On other occasions only one messenger has been used, with the simple function of carrying notes from one location to another without the possibility of interception. The two methods have never been compared in a controlled experiment, and it is not clear from simple observation what effect the use of one or the other has.

The win criteria have been modified somewhat, but this feature is not of great importance, since win criteria serve more to motivate the players than to represent the realities of "victory" or "defeat."

A suggestion from the last demonstration of the series relates to win criteria, and may be adopted in the future. In order to tie the fate of the villagers more closely to that of the belligerents, it was proposed that the winning belligerent itself select the winning village--or at least be able to reward the village it most favors at the end of the game. This would make the motivation chain much more direct for the villages, and also make the simulation closer to the assumed reality.

One other recent suggestion has been the use of explicit scenarios for each of the villages, together with an overall introductory scenario for the whole game. The problem with this approach is that it implies a consideration of the total insurgency situation, while the game should be viewed quite clearly as dealing only with certain specific factors in the total situation--namely, loyalty, information, and force. Perhaps if the scenarios were carefully written this danger could be avoided, and this possibility is being studied.

APPENDIX 1

AGILE/COIN GAME MATERIALS

<u>Contents</u>	<u>Page</u>
Introduction to the Game	1-1
Instructor's Guide	1-4
Rules for Belligerents	1-7
Rules for Government Administrators	1-12
Rules for Villagers	1-14
Sequence of Events during Visit	1-18
Villager Report Form	1-19
Winning Criteria	1-20
Village Record Form	1-21
Casualty Calculation	1-22
Critique Form	1-25
Suggestions to Players	1-26

Introduction

This will introduce the AGILE-COIN Game, an exercise designed to demonstrate some of the important political and operational factors in the transition from the terrorism phase to the guerrilla warfare phase of insurgency.

The game may be played by training groups ranging from fifteen to over fifty men. A minimum time of four hours is recommended: at least one hour for briefing and rule familiarization which should include a short demonstration game; two to two and a half hours of actual play; and one-half to one hour for de-briefing and discussion of results. More than two hours' play is usually required for the belligerents to perceive each others' strategies and have time to respond effectively.

It has been our experience that players learn most by playing each major role twice--the first time for familiarity and the second for experimenting with strategies and tactics. Since there are three major roles (Insurgent, Villager, Government), this suggests a minimum of six game experiences per student, or a total time allocation of 24 hours or three days.

The physical space requirements vary with the number of players and teams. The minimum-size game of twenty players (including two referees) on six teams (Control, Insurgent, Government, plus three Village Teams) requires five small rooms on a common corridor (or an average back yard with five clumps of bushes or tents). If larger teams are desired, more space per team must be provided. If more teams of the minimum size (3 in villages, 2 on belligerents, 2 on control) are desired, more separate rooms will be needed.

Ordinary tables and chairs may be used in the rooms. (No furnishings are needed if the game is played outdoors.) Game equipment consists of rules, forms, and simple counters representing people. No special equipment or hardware is required.

Minor additions have been made for the teaching game that involve primarily the mechanics of record-keeping on populations held by all players, the rapid calculation of outcomes of military engagements, reporting and display requirements, and win criteria. These changes have been incorporated in the game materials presented in this Appendix.

Introduction to Game Details

For players with limited or varied experience, it is wise to have an appropriate briefing session: well-organized, succinct, and just as long as is required to orient the players on the general game procedures in order to preclude gross confusion at the early stages of play. A short demonstration game of about thirty minutes duration with five minute moves is recommended as a part of the initial orientation.

Moreover, much of the learning the player acquires from these game exercises is summarized and highlighted during the debriefing sessions and in further post-game analysis. In order to provide the necessary data for these activities, the players should be urged to submit the reports called for during the game promptly, to keep copies of their correspondence, and to record other information on motives, attitudes, and strategies.

Members of the Control team will play a vital role in expediting game actions. Wherever possible, extra players should be assigned to the Control team (these do not need to be students), with a Control member assigned to each belligerent and each village ideally. He could keep accurate count of populations, prepare the loyalty forms, and answer procedural questions on game rules, legitimate tactics, etc.

It is also emphasized that village players incur no penalty for indicating sympathy with the Insurgents, other than what the Government team can do, should these sympathies come to the government's notice.

Control members should have a thorough knowledge of the rules before the game. The belligerents should be briefed on the game details and given a short period to prepare strategies. Then the villagers should be given an abbreviated briefing on game rules using the villager rule sheets as a guide. Villagers then proceed to their respective village areas with one Government Administrator per village (if assigned by the government) and wait until the game begins. Players should be encouraged to ask questions during the briefing sessions and all procedural questions should be answered.

After the debriefing, all players should complete a copy of the game critique and submit all their notes and recorded materials to Control.

It is estimated that the game design team can train instructors in operating and supervising the game in one full day.

TYPICAL SPACE REQUIREMENTS

Number of Players	Number of Teams	Number of Rooms	Size of Rooms
20	1 Control (2 ea) 2 Belligerents (2 ea) 3 Villages (3 ea) 3 Administrators 2 Couriers	5	100 ft. ²
26	1 Control (2 ea) 2 Belligerents (2 ea) 3 Villages (5 ea) 3 Administrators 2 Couriers	5	150 ft. ²
	OR		
28	1 Control (2 ea) 2 Belligerents (2 ea) 5 Villages (3 ea) 5 Administrators 2 Couriers	7	100 ft. ²
35	1 Control (3 ea) 2 Belligerents (3 ea) 3 Villages (7 ea) 3 Administrators 2 Couriers	5	200 ft. ²
	OR		
39	1 Control (3 ea) 2 Belligerents (2 ea) 5 Villages (5 ea) 5 Administrators 2 Couriers	7	150 ft. ²
	OR		
39	1 Control (3 ea) 2 Belligerents (3 ea) 7 Villages (3 ea) 7 Administrators 2 Couriers	10	100 ft. ²

INSTRUCTOR'S GUIDE ARPA - AGILE COIN GAME

The following check list should be used for game preparation, operation and post-game analysis.

I. Game Preparation

A. Players

The game should have a minimum of 20 players. Any number from 20 to about 50 can be accommodated. The village players should be divided into from 3 to 7 groups with from 3 to 7 players in each group to form villages. The Insurgent team should have from 2 to 5 players; the Government should also have from 2 to 5 principal players and at least enough administrators for 1 per village. A courier should be provided for each belligerent team, and 2 to 5 people can be used on the Control team.

B. Facilities

Each village group should have its own space that permits limited communications between the groups. The belligerent teams should each have separate headquarters that can be isolated from the game action.

C. Materials

Before the game begins, each player should be given rules and procedures appropriate to his part and given time to study them and formulate questions. Belligerent folders should contain:

1. Rules for Belligerents
2. Rules for Villagers
3. Suggestions for Play
4. Critique forms
5. Message forms
6. Sequence of Events during a Visit
7. Statement from a Viet Cong Directive
8. What the AGILE COIN Game Is and Is Not
9. Timing Graph
10. Map of the Area
11. Rules for Government Administrators
(Government folder only)
12. Chips representing forces: Government,
175-250 for 3 to 7 villages; Insurgents,
50-75 for 3 to 7 villages. These force
sizes must be kept secret.

Village folders should contain:

1. Rules for Villagers
2. Procedures for Villages with more
than one Player

3. Suggestions
4. Critique forms
5. Message forms
6. Sequence of Events during a Visit
7. Statement from a Viet Cong Directive
8. What the AGILE COIN Game Is and Is Not
9. Timing Graph
10. Village Name Cards
11. Report forms, 15 for each player
12. Chips representing villagers: 100 per village divided equally among the players

The Control folder should contain:

1. Control record sheets
2. Casualty Calculator
3. Die (or Dice)
4. Bell
5. Briefing Outline
6. Win Criteria
7. Display Sheets
8. Complete Set of Rules

D. Briefing

The pre-game briefing should be scheduled to last about one hour for first-time players, and should cover the following subjects:

1. Objects of the game and general conditions for winning
2. Censored rules for villagers
3. Move sequences and visit mechanics
4. General resource levels
5. Courier service, message pads, and inter-village communications
6. Delays in messages, intelligence and training
7. Bell
8. Engagements
9. Role of Administrators and Spies (Insurgent spies should be selected and notified secretly and informed that they can communicate by writing messages on the report form that will be delivered by Control)
10. Chips representing people
11. Village elections, role of the chief
12. Reports after every cycle
13. Abduction and voluntary departure from the village
14. Divide into 3 groups: Government, Insurgent and Villagers to continue with detailed briefings. Allow about 20 minutes for strategy formulation.

II. Game Operation

The game is played by the belligerents visiting the villages in alternate equal length time periods, with the Insurgents moving first. The time period is characteristically 10 minutes in length, but it can be adjusted

by the Control team to control game dynamics. It is desirable to get as many moves as possible into the time allotted and to avoid boredom on the part of all players if the action is slow and yet also to allow time for planning and Control functions, if the action is fast.

The Control team is responsible for:

1. Player's following the rules
2. Handling the chips for visits and engagements
3. Collecting reports
4. Maintaining displays and records
5. Situation-specific decision-making
6. Signifying winner when necessary

III. Post-Game Analysis

A. The De-Briefing Session

Immediately after the game is stopped (because either the time has run out or the win criteria have been met), a de-briefing session should be held with discussion structured in the following sequence:

1. Control's summary of the overall play and presentation of loyalty and population profiles
2. Presentation of Government strategy and play
3. Presentation of Insurgent strategy and play
4. Report on village play from each chief
5. Discussion including descriptions by the village players of their perceptions, strategy and concepts of loyalty as reported during the game

B. Analysis of the Game

After the game, the Control team should write a brief descriptive summary of the game. This general description should be combined with actual control records of the game, villager report forms, and all written messages to enable analysts to reconstruct the game. The attached village analysis form has been found useful for this purpose. The Comments section should focus on what affects loyalty, particularly the events leading up to loyalty changes. Reasons given on the back of the villager report forms for loyalty shifts are particularly useful for this. Correlations between "Loyalty", "Who do you think is winning", "Who do you want to win", and "How much longer will the game last" are useful to observe the cross-pressures felt by the villagers. Other factors bearing on loyalty are frequency of belligerent visits and size of the visiting force, village population level and the causes of its decline, the presence of a Government administrator, ambush placement, and military engagement outcomes.

The reconstruction and analysis of the game usually require about one hour per village and are, therefore, not usually available until the day after the game. However, learning outcomes can be considerably improved by a discussion of the game analysis on the following day since until this time, no single player has had an overview of the complete game.

RULES FOR BELLIGERENTS

GAME OBJECTIVE

To observe the effects of coercion and counter-coercion on village loyalty using terror, impressment, recruitment, and protection.

TEAMS

There are three types of teams in the game: Two belligerents, Insurgents, Government; and the Villages (population). There is only one Government and one Insurgent team; but there are several Village teams.

PLAYER OBJECTIVES (Definitions of Winning)

Insurgents -- Gain the loyalty of villages and increase forces.

Government -- Gain the loyalty of villages and decrease insurgent forces.

Villages -- Survival and ending of conflict as soon as possible. The winning village is loyal to the winning side at the time of victory and has incurred the least population loss.

There are 2 winners: the successful belligerent and the winning villager. The exact criteria (predetermined) for winning the game by either belligerent are known only to Control.

MOVE RATES

Government and Insurgents are given alternate periods for action (to simulate days and nights). These alternate periods are normally ten minutes long. If the belligerents exceed the pre-set move time, they lose 10% of their remaining forces per minute (to simulate Government forces being caught at night, or Insurgent forces being caught out during daylight). Move limits are signified by bell ringing: 1 = night; 2 = day.

RESOURCES

Insurgent forces are represented by tokens (chips, cards, etc.) which are colored red. The size of the insurgent force is known only to the insurgent leader (and Control), but ranges from 20 to 150 men. The initial government force, represented by blue colored tokens, ranges between 100 and 250 men. Each village starts with a population of 100 men, also represented by tokens of a particular color for each village.

MILITARY

1. Ambush (surprise) increases force effectiveness, but a betrayed ambush reduces force effectiveness according to casualty tables maintained by Control.
2. The numerically superior force (in effective units) always wins. No prisoners are taken, and forces are killed in proportion to numbers and force ratios (indicative of length of battle).
3. Both Insurgent and Government can recruit by persuasion or impressment from villages, but villages can respond by shifting loyalties, giving intelligence to the adversary, or in some cases, violently resisting.
4. Any player (villager or belligerent) can kill with a sufficient force superiority.
5. Villages can fight at an effectiveness of 1 to 5 against either Government or Insurgents. Example: 50 villagers can kill 9 belligerents.
6. Whenever there is any kind of military action in a village, some villagers are killed in the crossfire in proportion to the size of the military action.
7. Large ambushes are more likely to be detected by the adversary. Ambushes of less than 10 are not detected (unless betrayed). Control will judge whether or not a large ambush is detected, based on probabilistic criteria. If it is considered detected, Control will warn the intended victim of the ambush.
8. Number of Government casualties is known to Insurgent winning an engagement; the converse is not true.

INTELLIGENCE

The Government team is provided with a special display of information for each village, if an administrator is alive in the village. The display of village loyalties and populations is reported by the chief and delayed one game cycle. The belligerents also have courier services to carry messages. Intelligence is gained more routinely by villagers and belligerents by face-to-face interrogation.

ATTRITION FROM DESERTIONS

One percent each of belligerent forces desert each move, with an 0.5 probability of returning to a village.

DEPLOYMENTS

The Government must keep at least 10% of its force at home (the capital) of which 1/2 may be recruits. Failure to comply will result in Control's penalizing severely. Home base can be attacked by Insurgents to inflict losses and gain current loyalty and population information displayed. This attack can occur at any time - even during the Government move - by the Insurgents visiting Government headquarters in the presence of a Control person. Forces are engaged as in a no-surprise case.

Each belligerent must deposit with Control the tokens representing the size of his visiting force at each village. These tokens are returned to him at the end of the move--not at the end of each village visit. He cannot move his entire force from village to village in a single move. Visiting Government forces must always be at least 2 soldiers, but Insurgents may visit singly.

RULES FOR ACTION

1. There is no limit to the number of villages that can be visited in each time period by either belligerent, except the lack of visiting forces and the decision for a reconnaissance visit in force (see No. 7).

2. There is an impressment ratio of 1 villager: 3 impressors and a delay before use of impressed villagers because of the requirements for training. Impressed villagers can then be forced to fight along with the belligerents if they are accompanied by an equal number of belligerents. Example: 27 Insurgents can impress 9 villagers. These villagers are in training during the next move of the impressor and cannot be used by him. However, at the beginning of his second move after impressment, 9 Insurgents can fight side-by-side with the 9 impressed villagers making a force of 18.

3. Villagers that have been impressed or recruited may be returned by the belligerents to their home villages at the discretion of the impressor, subject to losses.

4. A Government administrator (unarmed, but taken from the initial Government force) may be left in each village to give information or warning. If there is a Government ambush in a village, villagers may not kill the administrator without killing the entire ambush.

5. The Government cannot set ambushes for Insurgents until Insurgents take some action in the villages (impressment, recruitment, or killing).

6. A visit by Government or Insurgent to a village is made in the following sequence:

- a. The belligerent approaches the village.
- b. During this approach the villager or administrator may warn the belligerent of an ambush verbally or by holding up a written card so indicating.
- c. The belligerent gives the tokens showing the number in his visiting force to Control.
- d. Control tells the villager the approximate size of the visiting force (small, medium, large).
- e. If there is an engagement, Control announces the result. A belligerent cannot speak to the villager if he loses due to the ambush, or if the villager decided to fight the visiting force and wins.
- f. Belligerents can gather intelligence through discussion with personnel in the village, or take action in the village, only if they have made a successful entry.

7. Either belligerent may make special reconnaissance visits to gain information about a suspected ambush in a village by informing control and the village chief of his intention. Control will then reveal the true ambush status of that village. If there is an ambush present the belligerent may then use this information as adequate warning upon his return to that village on his next move. Only that one village may be visited during the subsequent move.

RECORD KEEPING

Villages record loyalty and village population after every cycle. Reasons must be listed for changes in loyalty values. Loyalties are shown as "C" (Government), "I" (Insurgents), or "N" (neutral). Major discrepancies between voluntary actions and stated loyalties are subject to negotiation with Control at the end of the game. Loyalty changes must go through neutral for one cycle when changing sides.

Intelligence estimate forms may be kept to aid village planning.

COURIER SERVICES

A Government and an Insurgent courier carry written messages between their headquarters and villages. They may also be used to exchange messages between villages.

ABDUCTION RULES

Belligerents may abduct and release individual village players. Players in custody must be taken to belligerent headquarters and guarded by a belligerent team member. The village player's population is under the control of the village chief while he is away. If he returns, he resumes control of his villagers.

Recruits and Impressed men may not all survive the training period. The actual number returned to a village will be calculated by Control on a probabilistic basis.

Counter-Ambushes must be based on positive intelligence of the presence of an ambush in a given village, and this intelligence must be declared to Control first. The village host to an ambush may elect to betray the counter-ambush by "warning" the ambush it is host to. The village does this by private declaration to Control at the approach of the counter-ambush forces. In the event of a betrayed counter-ambush of a betrayed ambush, engagement is considered as a no-surprise case.

Villages cannot engage in ambushes or counter-ambushes. They can only act militarily at one-fifth effectiveness.

Villages know only the approximate size of approaching counter-ambushing forces (large, medium, or small).

If village warns of ambush smaller than actually present, or if a general warning (unspecified betrayal) is given, the engagement is considered as a no-surprise case.

Time out may be called from time to time by Control as required.

When trainees are returned to the villages, their fighting effectiveness is increased from 1:5 to 1:2 and it may be used against either belligerent.

Insurgent spies may be present.

RULES FOR GOVERNMENT ADMINISTRATORS

1. You are the government administrator in a village. Your loyalty is to the government and you will always tell the government the truth, answering any questions asked of you by the government; also volunteering any information you think would be helpful to the government. You are an information storage device, accessible only to the government. You may lie or refuse to speak to the insurgents or the village chief.
2. You are, while you're alive, also the communications link to the government. As such, you send notes through the government courier service when you or the village chief have information to pass on to the government, or to answer government notes. Further, if you know of an ambush in your village or another village, you may warn an approaching government team of this fact by stepping into warning area (after government approaches) and telling government.
3. You wish to aid the government in gathering information and gaining loyalty. You will therefore:
 - a. Try to ascertain what the loyalty of your assigned village is. The information on the sheet the chief hands to control will not be received by the government until one cycle later--if you can find out the information sooner, the government will be helped.
 - b. Try to influence the village chief in the village to which you are assigned to become pro-government. Persuasion, lies, threats, all are possible, allowable ways of influencing. However, if you become sufficiently obnoxious, the villagers may decide to assassinate you. Any persuasive action on your part must be done on orders from the government--not initiated by you.
4. There is an excellent chance that at some point in the game, you will be killed. There are several ways in which this can happen:
 - a. The insurgents may kill you, with or without the consent of the village. If the village at which you are stationed does not choose to defend you, you may be slain by a single visiting insurgent. If, on the other hand, the village wishes to defend you, the insurgents will need a force.
 - b. The village may kill you at any time, by informing you that you are dead. (If there is no government ambush in the village.)

When killed, you may not inform the government which of the two options was used to kill you and you must leave the village immediately.

5. In the event that you are killed, you will go to the administrator queue at Government Headquarters. New administrators will be taken from the queue (on a first-in-first-out basis) as needed by government, and distributed to villages as the government desires. While in the queue, the administrators are dead and in limbo, waiting to return to their next reincarnation as administrator of some village or other. While in the queue no information concerning the game should be exchanged, and little talking should be conducted.

6. When an administrator is taken from the queue and assigned to a village, he may freely relate only that information (or pro-government falsehoods) to the village chief that he has been given or perceived since being "re-incarnated."

AGILE-COIN GAME

RULES FOR VILLAGERS

GAME OBJECTIVE

To observe the effects of coercion and counter-coercion on village loyalty using terror, impressment, recruitment, and protection.

TEAMS

There are three types of teams in the game: Two belligerents, Insurgents, Government; and the Villages (population). There is only one Government and one Insurgent team; but there are several Village teams.

PLAYER OBJECTIVES (Definition of Winning)

<u>Insurgents</u>	Gain the loyalty of villages and increase forces.
<u>Government</u>	Gain the loyalty of villages and decrease insurgent forces.
<u>Villages</u>	Minimize losses, ending the conflict as soon as possible, and be on the winning side at the end of the game.

There are two winners: the successful belligerent and the winning village. The exact criteria (predetermined) for winning the game by either belligerent are known only to Control.

MOVE RATES

Move limits are signified by bell ringing: 1 = night (Insurgent move begins); 2 = day (Government move begins).

RESOURCES

Belligerent forces and village populations are represented by symbols (coins, chips, or cards).

MILITARY

1. Ambush (surprise) increases force effectiveness, but a betrayed ambush reduces the force to an effective number of some fraction of its size (to simulate counter-ambush).
2. The numerically superior force (in effective units) always wins.
3. Both Insurgent and Government can recruit by persuasion or impressment from villages, but villages can respond by shifting loyalties, giving intelligence to the adversary, or, in some cases, violently resisting.

4. Any player (villager or belligerent) can kill with a sufficient force superiority.

5. Villages can fight against either Government or Insurgents.

6. Crossfire may be dangerous.

7. Large ambushes are more likely to be detected by the adversary. Control will judge whether or not a large ambush is detected, based on probabilistic criteria. If it is considered detected, Control will warn the intended victim of the ambush.

INTELLIGENCE

The Government team is provided with a special display of information for each village, if an administrator is alive in the village. The belligerents have courier services to carry messages. Intelligence is gained more routinely by villagers and belligerents by face-to-face interrogation.

RULES FOR ACTION

1. Impressed villagers can be forced to fight along with the belligerents if they are accompanied by an equal number of belligerents.

2. A Government administrator (unarmed, but taken from the initial Government force) may be left in each village to give information or warning. If there is a Government ambush in a village, villagers may not kill the administrator without killing the entire ambush.

3. A visit by Government or Insurgent to a village is made in the following sequence:

a. A belligerent approaches a village.

b. During this approach the villager or administrator in warning area may warn the belligerent of an ambush verbally or by holding up a written card so indicating.

c. Control tells the villager the approximate size of the visiting force (small, medium, large).

d. If there is an ambush, a belligerent cannot speak to the villager if he loses due to the ambush, or if the villager decides to fight the visiting force and wins.

RECORD KEEPING

Villages record loyalty and village population after every cycle. Reasons must be listed for changes in loyalty values. Loyalties are shown as "G" (Government), "I" (Insurgents), or "N" (neutral). Major discrepancies between voluntary actions and stated loyalties are subject to negotiation with Control at the end of the game. Loyalty changes must go through neutral for one cycle when changing sides.

Intelligence estimate forms may be kept to aid village planning.

COURIER SERVICES

A Government and an Insurgent courier carry written messages between their headquarters and villages. They may also be used to exchange messages between villages.

ABDUCTION RULES

Belligerents may abduct and release individual village players. Players in custody must be taken to belligerent headquarters and guarded by a belligerent team member. The village player's population is under the control of the village chief while he is away. If he returns, he resumes control of his villagers.

VILLAGERS WITH MORE THAN ONE PLAYER

Each village player represents the leader of an extended family in the village. At the beginning of the game the village population (represented by tokens) is divided equally among the players.

The village chief is elected by majority vote. Each player has as many votes as the population of the group he represents, and elections may be held at any time. The chief decides and reports overall village loyalty (G, N, or I) to Control on the report form at the end of each move cycle. If there was a Government administrator present during the entire move cycle, the Government is given this information with a one cycle delay. The chief decides the number recruited from each player by either belligerent unless overruled by the belligerent. Unless specified by the belligerent, villagers impressed are taken in proportion to the population held by each player.

Village players may make their own decisions (not necessarily the same as the chief) about the military actions of their group (to fight or not to fight). Each player must secretly report his loyalty, population, and so on to Control on the form provided at the end of each move cycle. Only the chief's reporting of overall village loyalty is subject to delayed review by the Government as described above. Village players may spy for either side. Communications with belligerents are by discussions during visits or by notes written on the pads provided and delivered to the couriers.

Village players may leave the village and join the forces of the Insurgent (as cadre) or the Government (as soldiers). There will be a short (1 cycle) training period before they can be used in combat. They may return to their villages with the consent of the joined belligerent, but can expect to suffer losses on the trip due to the perils of the jungles. If consent is not granted, they can be forced to fight as impressed villagers.

Each player should keep a record of events and impressions. Reasons for loyalty shifts are particularly important.

Counter-Ambushes must be based on positive intelligence of the presence of an ambush in a given village, and this intelligence must be declared to Control first. The village host to an ambush may elect to betray the counter-ambush by "warning" the ambush it is host to. The village does this by private declaration to Control at the approach of the counter-ambush forces.

Villages cannot engage in ambushes or counter-ambushes. They can only act militarily against belligerents entering their village when no adversary belligerent forces are present.

Villages know only the approximate size of approaching counter-ambushing forces (large, medium, or small).

Time out may be called from time to time by Control as required.

Insurgent spies may be present.

When trainees are returned to the villages, their fighting effectiveness is increased and may be used against either belligerent.

SEQUENCE OF EVENTS DURING VISIT

1. Belligerent approaches village.
2. Control consults probability of detection table for ambush warning, gives approaching belligerent warning if table so indicates. (If applicable because of large size of ambush.)
3. Villagers or the administrator may warn of ambush (and its size, if desired).
 - a. If there is an ambush in the village, and village chief reports less men than actually present, engagement is fought as a no-surprise case.
 - b. If there is an ambush in the village, and the village chief reports the correct or greater number of men to the approaching belligerent, engagement is treated as a surprise case with the entering force as the surprising force.
 - c. Or they may give other warnings (false, ambiguous, etc.) or warnings about the other villages.
4. Belligerent decides whether to visit village and, if so, the size of the visiting force. Visiting force is handed to Control, and the belligerent declares whether his visit is a counterambush force (which, if control accepts his evidence, results in surprise advantages for belligerent).
5. Control communicates the approximate size of visiting force to the village (small, medium, or large).
6. Villages may respond by:
 - a. No action.
 - b. Fighting belligerent visitors, if no ambush present.
 - c. Warning ambush force in village of approaching counterambushing force, resulting in 1:1 force ratio conflict.
7. Control calculates and announces results of engagements if any, any communication desired, etc..

Note: ENGAGEMENT is the presence of both belligerents' forces in the same village.

An engagement may also occur between village and belligerent, but village may not participate in battle between belligerents. The presence of an administrator in village with visiting insurgents is not an engagement (i. e., not automatic). Executions are not engagements.

VILLAGER REPORT FORM

Village _____ Move _____

Is there an administrator in your village

Yes No (Circle one)

Loyalty: Insurgent _____
(check one) Neutral _____
 Government _____

Population (number of villagers) _____

If there was an engagement (fight) in your village
this turn, what were the losses of:

Government _____ Insurgents _____
Villagers (due to crossfire) _____

Village losses due to impressment _____

State reasons for loyalty shifts (on back).

Who do you think is winning? _____

Who do you want to win? _____

How much longer (# of moves) will game last?

State criticism of player's actions and game rules
on back of this sheet.

Signed: _____

WINNING CRITERIA

A. Government

1. Loyalty of a majority in every village
2. No insurgent loyalty in a majority of villages
3. Insurgents reduced to less than half original force

B. Insurgents

1. Majority of villages loyal (plurality role in each loyal village)
2. Minority loyalty in all other villages
3. Destroy 20% of government forces, increase own 20%

C. Individual Villager

1. In winning village
2. Loyal to faction which is winning
3. Largest % of original population of all those fitting C1 and C2 above

D. Individual Village

1. Loyal to winning belligerent
2. More men than any other village

AGILE COIN : VILLAGE RECORD

Village

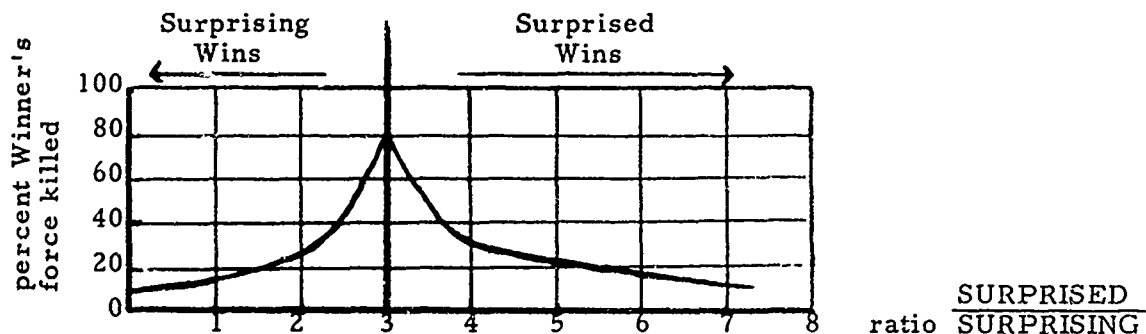
	CYCLE #		CYCLE #		CYCLE #		CYCLE #		CYCLE #		CYCLE #		CYCLE #	
	I	G	I	G	I	G	I	G	I	G	I	G	I	G
Belligerent														
Number visiting														
Administrator														
Ambushes left														
Battle losses														
Village group														
Crossfire loss														
Recruits	I	G	I	G	I	G	I	G	I	G	I	G	I	G
Impressed	I	G	I	G	I	G	I	G	I	G	I	G	I	G
Returned	I	G	I	G	I	G	I	G	I	G	I	G	I	G
Assass.	I	G	I	G	I	G	I	G	I	G	I	G	I	G
Abducted	I	G	I	G	I	G	I	G	I	G	I	G	I	G
Population left														
Loyalty														
Winner expected														
Winner prefer'd														
Expected length														

AGILE/COIN CALCULATION OF CASUALTIES

If only one belligerent has certain knowledge of an impending engagement, it is a case of SURPRISE. If both are equally aware of what is going to occur, it is a NO SURPRISE case. Note that ambush will normally result in the entering force being surprised, while the force in ambush does the surprising. However, the position may be reversed, if, for example, the entering force has detailed knowledge of the ambush, but the ambushing force does not know it has been betrayed.

SURPRISE CASE

1. Find ratio of SURPRISED force to SURPRISING force.
2. Enter ratio on horizontal axis of chart:



Read off percent of Winner's force killed on vertical axis, and multiply by size of Winner's force to find number of Winner's casualties.

3. Loser's casualties are always 80% of force committed.
4. To find number of villagers killed by crossfire, divide the total number of men firing by 5, and multiply the result by the percent of Winner's force killed (as indicated by the chart).
5. Collect chips for casualties, and return survivors to belligerents.

NO SURPRISE CASE

1. Larger force wins. If forces are exactly equal, both lose 80% of forces committed.
2. Number of Winner's force killed is given in accompanying table. Find size of Winner's (larger) force on left margin, and Loser's (smaller) force on top margin. Winner's casualties can be read off where the row and column intersect.
3. Number of Loser's force killed is always 80% of force committed.
4. Number of villagers killed by crossfire is found by dividing total number of men firing by 5.
5. Collect chips for casualties, and return survivors to belligerents.

AGILE/COIN GAME: CASUALTY CALCULATION

No-Surprise: Number of Winner (Larger) Force Killed

		Size of Smaller Force Committed →																					
		1	2	3	4	5	6	7	8	9	10	12	14	16	18	20	22	24	26	28	30	35	40
← Size of Larger Force Committed	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	1	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	0	1	1	2	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	1	2	3	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	1	2	2	4	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	1	1	2	3	4	6	7	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	1	1	2	3	4	5	6	8	0	0	0	0	0	0	0	0	0	0	0	0
	12	0	0	1	1	2	2	3	4	5	7	10	0	0	0	0	0	0	0	0	0	0	0
	14	0	0	1	1	1	2	3	4	5	6	8	11	0	0	0	0	0	0	0	0	0	0
	16	0	0	0	1	1	2	2	3	4	5	7	10	13	0	0	0	0	0	0	0	0	0
	18	0	0	0	1	1	2	2	3	4	4	6	9	11	14	0	0	0	0	0	0	0	0
	20	0	0	0	1	1	1	2	3	3	4	6	8	10	13	16	0	0	0	0	0	0	0
	22	0	0	0	1	1	1	2	2	3	4	5	7	9	12	15	18	0	0	0	0	0	0
	24	0	0	0	1	1	1	2	2	3	3	5	7	9	11	13	16	19	0	0	0	0	0
	26	0	0	0	0	1	1	2	2	2	3	4	6	8	10	12	15	18	21	0	0	0	0
	28	0	0	0	0	1	1	1	2	2	3	4	6	7	9	11	14	16	19	22	0	0	0
	30	0	0	0	0	1	1	1	2	2	3	4	5	7	9	11	13	15	18	21	24	0	0
35	0	0	0	0	1	1	1	1	2	2	3	4	6	7	9	11	13	15	18	21	23	0	
40	0	0	0	0	0	1	1	1	2	2	3	4	5	6	8	10	12	14	16	18	24	32	
45	0	0	0	0	0	1	1	1	1	2	3	3	5	6	7	9	10	12	14	16	22	23	
50	0	0	0	0	0	1	1	1	1	2	2	3	4	5	6	8	9	11	13	14	20	26	
55	0	0	0	0	0	1	1	1	1	1	2	3	4	5	6	7	8	10	11	13	18	23	
60	0	0	0	0	0	0	1	1	1	1	2	3	3	4	5	6	8	9	10	12	16	21	
65	0	0	0	0	0	0	1	1	1	1	2	2	3	4	5	6	7	8	10	11	15	20	
70	0	0	0	0	0	0	1	1	1	1	2	2	3	4	5	6	7	8	9	10	14	18	
75	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	5	6	7	8	10	13	17	
80	0	0	0	0	0	0	0	1	1	1	1	2	3	3	4	5	6	7	8	9	12	16	
85	0	0	0	0	0	0	0	1	1	1	1	2	2	3	4	5	5	6	7	8	12	15	
90	0	0	0	0	0	0	0	1	1	1	1	2	2	3	4	4	5	6	7	8	11	14	
95	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	5	6	7	8	10	13	
100	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	5	5	6	7	10	13	
110	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	4	4	5	6	7	9	12	
120	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	5	5	6	8	11	
130	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	3	4	4	5	6	8	10	
140	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	4	5	7	9	
150	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	4	5	7	9	
160	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	3	3	4	4	6	8	
170	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	2	3	3	4	4	6	8	
180	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	3	4	5	7	
190	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	3	3	4	5	7	
200	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	3	3	4	5	6	

Number of Loser (Smaller) Force Killed Is
Always 80 Percent of Force Committed

No-Suprise: Number of Winner (Larger) Force Killed

		Size of Smaller Force Committed →															
		45	50	55	60	65	70	75	80	85	90	95	100	110	120	130	140
Size of Larger Force Committed ↓	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	45	36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	50	32	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	55	29	36	44	0	0	0	0	0	0	0	0	0	0	0	0	0
	60	27	33	40	48	0	0	0	0	0	0	0	0	0	0	0	0
	65	25	31	37	44	52	0	0	0	0	0	0	0	0	0	0	0
	70	23	29	35	41	48	56	0	0	0	0	0	0	0	0	0	0
	75	22	27	32	38	45	52	60	0	0	0	0	0	0	0	0	0
	80	20	25	30	36	42	49	56	64	0	0	0	0	0	0	0	0
	85	19	24	28	34	40	46	53	60	68	0	0	0	0	0	0	0
	90	18	22	27	32	38	44	50	57	64	72	0	0	0	0	0	0
	95	17	21	25	30	36	41	47	54	61	68	76	0	0	0	0	0
	100	16	20	24	29	34	39	45	51	58	65	72	80	0	0	0	0
	110	15	18	22	26	31	36	41	47	53	59	66	73	88	0	0	0
	120	13	17	20	24	28	33	37	43	48	54	60	67	81	96	0	0
	130	12	15	19	22	26	30	35	39	44	50	56	62	74	89	104	0
	140	12	14	17	21	24	28	32	37	41	46	52	57	69	82	97	112
	150	11	13	16	19	23	26	30	34	39	43	48	53	65	77	90	105
	160	10	12	15	18	21	24	28	32	36	40	45	50	60	72	84	98
	170	10	12	14	17	20	23	26	30	34	38	42	47	57	68	80	92
	180	9	11	13	16	19	22	25	28	32	36	40	44	54	64	75	87
	190	9	11	13	15	18	21	24	27	30	34	38	42	51	61	71	83
	200	8	10	12	14	17	20	22	26	29	32	36	40	48	58	68	78

Number of Loser (Smaller) Force Killed is
Always 80 Percent of Force Committed

AGILE COIN GAME

CRITIQUE

1. What role did you play in the game?
2. What aspect did you find most realistic?
3. What aspect did you find most un-realistic?
4. What was your best move?
5. What was your worst error?
6. What would have been your best strategy?
7. Did you become deeply involved in the action?
8. Do you think the game was too short, about right, or too long? (circle one)
9. Do you think the game was too complex, about right, or too simple? (circle one)
10. Do you think the teams had too few, about the right number, or too many players? (circle one)
11. How many times should a soldier play the game to exhaust its training possibilities? Once? Three times? Ten times? Thirty times? (circle one)
12. What did you find most confusing about the game?
13. Who would learn most from playing this game?
14. What could be learned from observing many plays of the game?
15. How does the game compare with other training techniques?
16. How does the game compare with other research techniques?
17. Please write any suggested improvements on back of sheet.
Thank you.

Name

Telephone No.

AGILE-COIN GAME

Some suggestions for the players derived from game critiques.

GOVERNMENT

Build up security in a few key villages and couple this with aggressive acts in the others.

Punish quickly those villages which are changing loyalty toward the insurgents.

Aggressive action pays off.

Record a plan of attack and communicate this to the villages.

Use the villages as information sources by asking questions about insurgent policies, and maintain a record of administration losses.

Play on motive of payoff to villager. Villager can have no losses of people, but if on losing side, he still loses.

Impress equally to provide a large mobile force to maintain loyalty.

Avoid role playing--it wastes time and bores villagers.

Communicate your plan and other information (true or false) that will win village loyalty.

Ask about number of villagers and administrator, insurgent visits, neighboring villages.

Avoid the trap of trying too hard in the early stages instead of planning a long range strategy, and developing information channels. Don't get into a position of hoping the insurgents will run into an ambush rather than taking positive measures to punish villages that warn of ambushes.

GENERAL

To a large extent the dynamics of the game are determined by the Insurgents' general strategy. Government will usually wind up in trouble unless it correctly perceives the nature of Insurgent's strategy and counters that strategy directly.

AGILE-COIN GAME

Some suggestions for the players derived from game critiques.

INSURGENT

Send one man into each village from time to time on scouting -- if government ambush is present, you will learn of it at low cost.

Information is all important. Try to establish an information center by rewarding and punishing villages.

Determine whether intelligence is accurate or not by testing.

Act only with careful judgment, but then be decisive.

Appeal to a group of villages for their loyalty and a significant number of men, and pledge their return (force villagers into collusion so that they cannot act independently without causing confusion and distrust).

GENERAL

To a large extent the dynamics of the game are determined by the Government's general strategy. Insurgents will usually wind up in trouble unless they correctly perceive the nature of Government's strategy and counter that strategy directly.

AGILE-COIN GAME

Some suggestions for the players derived from game critiques.

VILLAGES

Avoid being drawn into forcing a win at great sacrifice.

Remember that a dead administrator allows freedom in loyalty position, but such freedom may require lying to government.

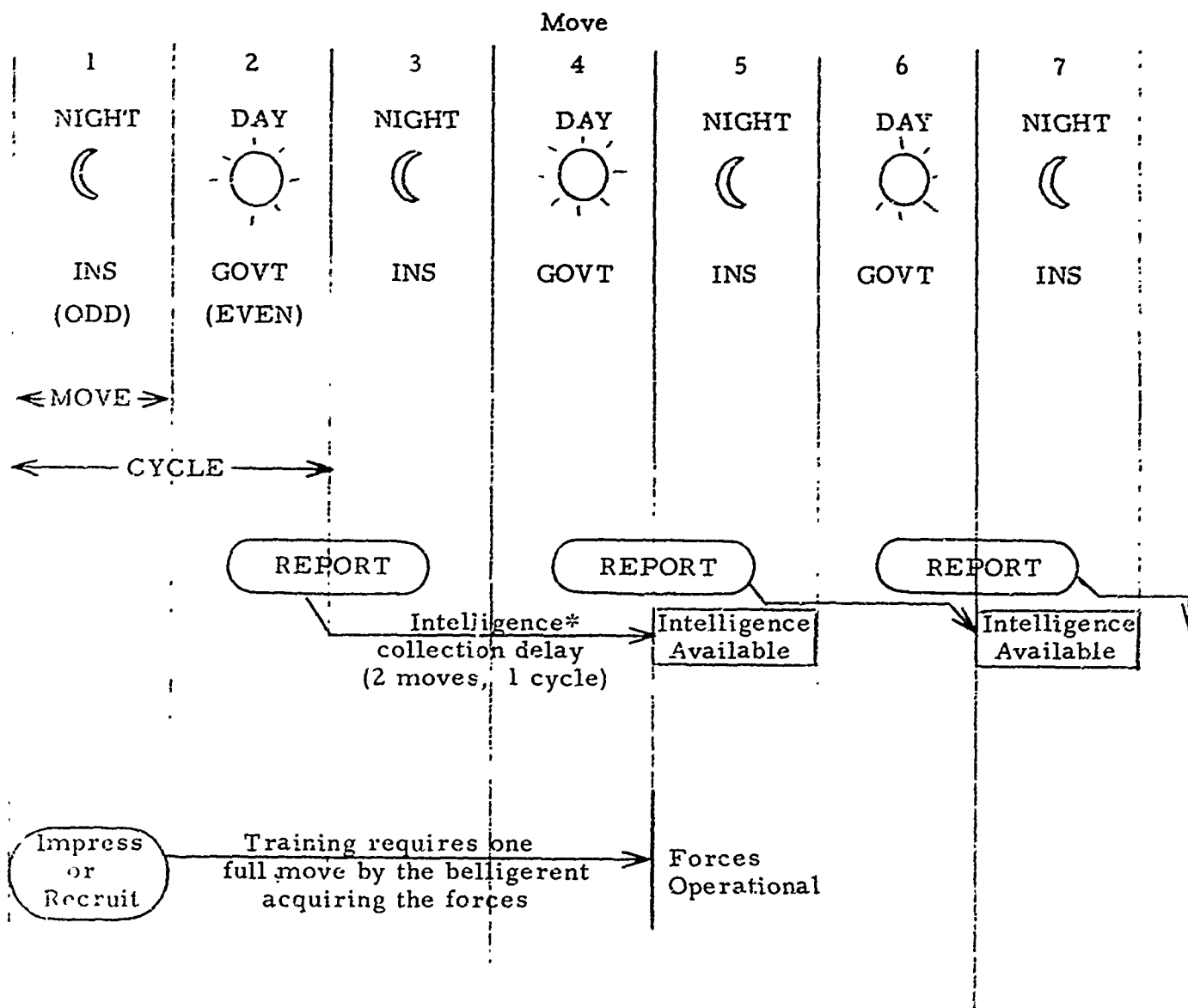
Test both sides' willingness to act, impress, etc., by false (made up) information.

When government plays a passive strategy, village can take a high risk position in helping insurgents.

Prepare notes to both sides ahead of time to speed up communication. Notes prevent eavesdropping.

Be careful to space information about other villages so that betrayal won't be so obvious.

Avoid having troops left in ambush and avoid impressment without reward. It is hard to get the troops out once they are positioned.



TIMING

* Intelligence (chief's assessment of village loyalty and population) available to Government if Administrator present--otherwise not.

APPENDIX 2

AGILE/COIN DEMONSTRATION EXERCISES

Game Records and Critique Summaries

<u>Contents</u>	<u>Page</u>
Institute for Defense Analyses	2-1
Agency for International Development	2-13
The Infantry School	2-23
Mobile Command Headquarters	2-34
U.S. Air Force Academy	2-49
U.S. Naval Post-Graduate School	2-64

AGILE/COIN DEMONSTRATION EXERCISE #1

Institute for Defense Analyses, Washington, D. C.

September 28, 1965

A. Summary

1. The major features of the game were the overwhelming use of recruitment rather than impressment, the fact that only one major engagement took place, the related static concentration of government forces in two of the villages to the exclusion of the others, and the reluctance of the insurgents to set or spring ambushes.
2. Both belligerents were able to induce the villages to offer volunteers, that is to recruit rather than impress manpower. This was partly because of a common misconception about the return of 'trained men' to the villages (discussed in paragraph 9 below), and recruiting efforts tended to become less successful as the game wore on. Toward the end, the insurgents determined to increase their forces considerably, and were obliged to do so by force rather than agreement. Even then, there was extremely little use of terror tactics, one death per village faction being the maximum penalty inflicted by the insurgents on recalcitrant villages. The government never impressed men.
3. There was only one major engagement in the game, when an insurgent ambush of 25 men defeated a government force of 50 men in #2 (yellow) village during cycle 2. The losses calculated (10 insurgents killed and 45 government soldiers killed) misled both belligerents as to the size of the opposing force, the government believing it had been defeated by a much larger force, and the insurgents fearing they had not inflicted significant damage. This engagement apparently had the effect of inhibiting both belligerents--neither was anxious to undertake any military action thereafter. There were however minor 'skirmishes', when single entering insurgents were killed by huge government garrisons. On one of these occasions, a warning was held out by a villager, but disbelieved by the insurgent chief who then sent a patrol of four men to immediate destruction. The insurgents set only one ambush--which was successful as described above. The government built up gradually two large static ambushes in the #2(yellow) and #3 (green) villages, ignoring the other villages. Since there was only one major engagement, there were very few crossfire losses in the game.

4. Action was concentrated in #2 (yellow), #3 (green), and #4 (blue) villages, almost to the exclusion of Violet village, which was completely ignored during two out of six full cycles. Partly this was simple geography, for Violet Village was 'out of the way', but the belligerents' choices were presumably also motivated by other information obtained.
5. Administrators were initially sent out to all villages, and were killed at first opportunity by the insurgents. Thereafter they were in general only replaced when accompanied by a government force and were therefore protected. The administrator in #3 (green) village especially seemed to be well in control of the situation. He was able to insist, for example, that even during visits by the government all negotiations be carried on with himself as intermediary between the government and the villagers.
6. Most of the villagers developed the habit of hiding some of their 'men' to give the appearance of having no more recruits for either belligerent; this was done especially well in #1 (violet) village.
7. There was only one mention of an attempt to set up a "reconnaissance visit", by the government forces, who dropped the idea on finding that such a reconnaissance would cost one full move. However, another new feature of this game--the abduction option--was used several times. Both belligerents exercised this option, but the only village in which this occurred was #4 (blue).
8. Neither belligerent seemed unduly worried by the time constraint. In both cases, minutes were frequently lost between the move-start signal and the belligerents' leaving headquarters, and the villagers had little difficulty in wasting time during visits, to their (the villagers') advantage.
9. The course of the game was much affected by what seemed to be a common misconception about the nature of garrisons/ambushes and about when a recruit was actually 'returned' (it is possible but unlikely that this misconception was simply a deliberate device of the government to mislead the villagers). The government had much success in recruiting owing to its offer to send back forces to the villages to act as a protective force once they had been trained; the government perceived this as building up a large garrison or ambush with the aid of the recruits, the villagers assumed that once returned to the village the recruits would 'rejoin their families', at least in terms of scoring.

10. The misunderstanding was ultimately cleared up in the game (not without some dispute), but the question presents a larger problem for future games. Should the belligerents be permitted to build up local 'militia', fighting at an effectiveness between that of the villager and the soldier? Or should we maintain the present situation in which the belligerent can offer a village nothing except terror or the promise of protection? If the latter, how clear should this be made to any or all the players in their briefing?

Near the end of the game (beginning in move 5), the insurgents were allowed on three occasions to make two visits to a village within the same move. They would first enter with a small force and if this was insufficient to satisfy their needs they would go outside and immediately return with a very large force. This was reluctantly allowed to increase the tempo of the game.

It would be preferable if belligerents were not able to visit the same village twice during one move, since there is otherwise no possibility of the village resisting one belligerent and seeking protection from the other.

11. Toward the end of the game, the insurgents occasionally used the punitive measure of 'killing' an individual village chief or head of family. In operative terms this was equivalent to killing one member of the family concerned, since the player maintained control of his family as 'son and heir'. In the case of the village chief, presumably an election should also have been held to decide on a new chief, perhaps the 'son and heir' of the old one; it is not clear whether this actually happened.

12. Counting individual chips is impractical, especially in the case of large government forces. It could be useful to have some kind of clip into which ten or twenty chips could be fitted, so that easily manipulable 'companies' of soldiers and/or recruits could be made up. As a less satisfactory solution, chips could simply be glued together in blocks.

B. Village Records

VILLAGE: Violet (1) CHIEF: Lt/C Jackson

Cycle	1	2	3	4	5	6	7
Move	1	2	3	4	5	6	7
Visit	I	G	5	40+	N	N	N
Loyalty	V	C	2	3	N	N	N
Population	100	97	94	95	95	83	
Administration	A		A				
Recruitment		3	3			12	
Ambush		G	I				
Outcome							

Throughout the game, Violet upheld a policy of neutrality, in accordance with its strategy to play one belligerent against another. This continued in spite of the fact that 2/3 of the villagers believed at all times that the Insurgents were winning. (The remaining faction reported that he neither knew nor cared who was winning; i.e., was neutral.) This was possibly due to the relative isolation of the village and the strong, sometimes threatening, messages received from the Insurgents.

The Government administrator, present in the village for cycles 3 - 6, reported to Headquarters that the village was basically sympathetic to the government, and would cooperate by sending 3 recruits per cycle for continuous protection of 50 men. At this point, they utilized only the government courier service. Evidently, the government did not respond quickly enough (Violet was not visited for 2 full cycles), for when the Insurgents displayed strength in move 11 they were able to recruit 12 men. Late in the game, Violet concluded that their best protection lay in frightening away both belligerent forces (accomplished by informing both belligerents of the presence of an enemy ambush, though none existed) and attempting economic coalition with other villages. The only recorded response was a positive one from the minority faction in Green.

B. Village Records

VILLAGE: Green (3)

CHIEF: Mr. Brundage

Cycle	1	2	3	4	5	6	7
Move	1	2	3	4	5	6	7
Visit	I	5	6	7	8	9	10
	G	2	40	26	21	2	2
Loyalty	V	N	N	G	G	G	G
	C	N	N	G	G	G	G
	2	N	N	I	I	I	I
	3	N	N	N	N	N	N
Population		94	92	72	74	75	73
Administration	A	A					
Recruitment	6	2	3				
	G	I	I				
Ambush		40	66	66	87	87	
		G	G	G	G	G	
Outcome			-II			-4I -2V	

Here the Government carried out its most successful strategy, and the Insurgents experienced their greatest failure. In the second cycle, the Government replaced the administrator and protected him with a large force which was built up by an additional 20 men on each successive cycle. The only other military engagements of the game resulted, but losses to the insurgents were minor. In addition, the government was able to recruit 21 trainees.

All this was accomplished in spite of the fact that the only faction loyal to the Insurgents was here. He sent continuous ambush warnings to the Insurgents, but they were unwilling to trust him completely. Hence, the messages were ignored and two small Insurgent parties were sent in and demolished.

Close ties developed between the majority faction of Green and Blue early in the game until they conspired to send false information to the Insurgents. Later loyalty information was exchanged, and by the end of the twelfth move the alliance was firm. The almost continuous presence of an influential administrator, and the alliance with a pro-government village enhanced the Government's position here.

B. Village Records

Cycle	1		2		3		4		5		6		7	
Move	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Visit	I	1			1				1				70	
Loyalty	G	21												
	V	N		N		G		G		G		G		
	C	N		N		G		G		G		G		
	2	N		N		G		G		G		G		
Population	3	N		N		G		G		G		G		
		100		100		97		77		63		63		43
Administration														
Recruitment									17					
Impressment								20				Abducted	20	
Ambush														
Outcome														

Blue finished the game with the smallest population, with substantial losses due to recruitment and impressment. These actions did not appear to have any affect on either village or individual loyalty. (Village and individual loyalty were consistent throughout the game, and messages between the government and Blue indicated that the chief was loyal even after being abducted.) After the government impressed 20 villages, blue was willing to give the insurgents 17 recruits, but this action was not accompanied by a change in loyalty. Throughout the game, blue tried to organize the villages in a single position (series of "In unity there is strength" messages). For the most part, this was unsuccessful, possibly because other villages were less willing to commit themselves until the end of the game.

The new abduction rule was utilized most vigorously here, by both belligerent teams.

Blue refused all offers of protection from both sides. Despite their loyalty to the government, they solicited insurgent support and thus maintained peaceful relations with the insurgents until the end of the game.

B. Village Records

VILLAGE: Yellow (2)

CHIEF: Col Sayre

Cycle	1	2	3	4	5	6	7
Move	1	2	3	4	5	6	7
Visit	I	G	25	50	53	36	14
Loyalty	V	C	2	3	4	5	6
Population	100	88	88	90	61	47	
Administration	I					A	
Recruitment					14	G	
Impressment	2	I			15	I	
Ambush		25			50	G	
Outcome					-15G -10I -4V	-2V killed	

The only large successful ambush of the game occurred here in move 4, with substantial losses to the government, as indicated above. The engagement was misinterpreted by both belligerents: the insurgents felt they had not been aggressive enough and were disheartened by the loss of 10 men, and the government felt it had been defeated by an even larger force. The insurgents feared retaliation on the part of the government (as falsely indicated by the villagers) and the government feared another ambush. Consequently, the village was entirely ignored by both belligerents for 2 complete cycles. There was no intelligence information exchanged between Yellow and the government. In move 9, after sending in a probe, the insurgents found the village unprotected and, unable to recruit volunteers, impressed 5 and killed 2. At this point, the insurgents recognized the government's weakness in not protecting the villages and decided to impress as many villagers as possible. Considerations of loyalty were not made, however, and the plan backfired abruptly when the neutral factions of the village shifted their allegiance to the government. The government was able to recruit 14 villagers on the next move, despite Yellow's concern over their diminishing population. In return, they received strong support from the government in the form of continuous protection. Yellow used the tactic of placing men in hiding to discourage the belligerents from requesting more recruits. In addition, messages were sent to the insurgents complaining about the population loss and demanding the return of the recruits.

C. Critiques

Numbers on left refer to question number on critique form. Numbers in brackets indicate number of responses of that type. There was a total of 17 respondents.

2. Most realistic aspect

Pressures on villagers	(4)
Failure of communications	(3)
Villager self-interest	(2)
Interpersonal relations	(1)
Time pressure in making belligerent decisions	(1)
Village administrator role	(1)

3. Most unrealistic aspect

Lack of communications between villages	(3)
Use of tokens to represent people	(2)
Inadequate manpower supplies	(1)
Threats of terror	(1)
Absence of fear	(1)
Difficulty of private discussion within game	(1)
No rewards to villages possible	(1)
Lack of staff for Insurgent "paper work"	(1)
Combat losses	(1)
Time pressure in making village decisions	(1)

7. Involvement

High	(9)
Moderate	(3)
Low	(1)
No answer	(4)

8. Length of game

Too short	(7)
About right	(10)
Too long	(0)

9. Complexity

Too complex	(1)
About right	(10)
Too simple	(4)
No answer	(2)

10. Team size

Too few	(4)
About right	(9)
Too many	(2)
No answer	(2)

11. Times to be played

Once	(2)
Three times	(7)
Ten times	(5)
Thirty times	(0)
No answer	(3)

12. Most confusing aspect

Rules	(2)
Loss computations	(1)
Filling out forms in middle of game	(1)
Lack of communication	(1)
Time sequences	(1)
Large number of variables	(1)
Returning trained villagers	(1)
Lack of precisely defined procedures	(1)
"Confusion disappeared as game progressed"	(1)

13. Anything new learned from the game

Supreme importance of intelligence and communications	(2)
Importance of personal relationships	(1)
Effectiveness of pressure tactics	(1)
"A great deal about <u>U. S.</u> thinking"	(1)

14. Those who would learn most from the game

Junior officers	(3)
Men going to Vietnam	(2)
Policy makers	(2)
Senior NCO's	(1)
People unfamiliar with insurgencies	(1)

15. Lessons to be learned from many plays

Effects of alternative strategies	(3)
Different sides of the same problem	(1)
Increase of pressure on villages as insurgency continues	(1)
Personalities of the players	(1)

16. Comparison with other training techniques

Better	(4)
Comparable	(4)
Worse	(0)
Don't know/No answer	(9)

17. Comparison with other research techniques

Better	(0)
Comparable	(1)
Worse	(2)
Don't know/No answer	(14)

18. Suggested improvements included

- Special category of "militia" (trained men returned to the villages)
- Include economic factors and possibility of rewards to villages.
- Population of village need not be revealed to belligerent unless he maintains a force in the village for one full cycle.

Critique forms were filled out rather hurriedly at the end of the game, and not all the participants had time to answer each question with consideration. The participants' reactions were largely favorable, with only one respondent clearly feeling that the exercise had little or no value.

There was, as usual, more agreement on the most realistic aspects than on the most unrealistic aspects of the game. The pressure of time in making decisions was cited in both categories, as being realistic with reference to belligerents, but unrealistic where village decisions are concerned. Just over half the players felt themselves deeply involved in the game, and only one reported low involvement. Most players found the game's length about right, all the rest judging it too short.

A majority found the game's level of complexity about right, one found it too complex, while four found it too simple. It may be significant that all these last four were playing as villagers or village administrators, while the one who found it too complex was on the Government team. Again, the majority thought the team size about right, though the dissenters were biased toward the opinion that it was too small. Two respondents felt that the game should be played once, no one chose thirty times, and the rest were fairly evenly divided between three times and ten times.

In commenting on the most confusing aspect of the game, only two respondents mentioned "rules" as an overall category, and one of these noted that the element of confusion was necessary and desirable. Another player remarked, "Confusion disappeared as game progressed", suggesting that the game may be a valuable tool in clarifying what is initially an unfamiliar and confusing situation. A number of other confusing elements were mentioned and specified in quite concrete terms (for example, loss computations and the status of villagers returned after military training), and some rule revision may be necessary as a result. It is worth noting, however, that some of these matters are left deliberately vague in order to give the belligerents more "leverage" on the villagers.

About one third of the players report having learned something new from the game, including in one case "a great deal about U.S. thinking." Most respondents felt that field operators (both military and civilian) would learn most from repeated plays, half of those who responded to the question suggested the effects of alternative strategies as the major lesson.

Eight of the players were willing to compare the game with other training techniques, and were equally divided in finding it better or roughly comparable. Only three respondents ventured to compare the game with other research techniques, two of them judging it worse and one of them finding it comparable.

Among the improvements suggested were the inclusion of economic factors, and a new category of armed village militia consisting of trained men returned to the villages by the belligerents, who would fight at the direction of the village chief. They would have a fighting effectiveness above that of

the untrained villagers, but below that of the belligerent forces. For purposes of scoring they would be counted in the village population. One further suggestion was to permit villagers to hide their population tokens, being obliged to disclose their number only when a belligerent had established a presence in the village for a full game cycle. These proposed changes will be discussed and the rules will be altered appropriately if necessary.

AGILE-COIN DEMONSTRATION EXERCISE #2

Agency for International Development, Washington, D.C.
October 28, 1965

A. Summary

The Insurgents designed their strategy to accomplish their two main objectives as quickly as possible: to increase their population significantly and to gain the loyalty of the villagers. The former was given priority, inasmuch as they did not feel they could offer the villagers significant protection without increasing the size of their own force. The Insurgents approached only one village per night, and in each instance after the first (they were a little slow getting started) they entered with a large force and impressed a large number of villagers. In addition, each visit to a village resulted in a government ambush being sprung and a decisive victory for the Insurgents. These victories, combined with their impressment policy and eloquent propagandizing, led 8 out of the 12 villagers who expressed an opinion to believe the Insurgents were winning. Had the game continued, the Insurgents would have begun returning villagers, now trained, as protective garrisons against the Government's increasingly aggressive forces. This, they felt, would have been a means of gaining the loyalty they had lost by their impressment tactics.

The Government's initial strategy was to place an administrator and a medium-sized force in every village. These garrisons were too small to ever defeat the Insurgents, but too large, and hence costly in terms of potential manpower losses, to be effective as decoys. With the exception of White Village, their impressments were few relative to those of the Insurgents. Furthermore, the pressure of time did not permit them to convince the villagers that these forces should be kept in hiding. This might have been done by the administrators.

After three disastrous defeats, the Government reversed its strategy and left a large ambush in one village and impressed 40 men from another. Had the exercise continued, this might have proved to be a major turning point.

Both belligerent teams concerned themselves almost entirely with military strategy, and neither made significant use of economic resources. These could have been a powerful tool for the Government as they were in a much stronger position economically than were the Insurgents.

B. Village Records

VILLAGE GREEN

Cycle	1	2	3	4	5	6	7	8
Number Visiting		15						
Group	25	25	25					
Population	25 25	25 25	25 25	25 25	25 25	25 25	25 25	25 25
Loyalty G, N, I	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N
Who is Winning	?	?	?	?	?	?	?	?
Winner Preference	-	-	-	-	-	-	-	-
Expected Game Length	?	?	?	?	?	?	?	?
No. Recruited								
No. Impressed								
No. Killed								
Who and how many in Ambush								
Ambush Out-	20	20	20	20	20	20	20	20
come (all casualties)								
Administrator?	N	Y	N	Y	Y	Y	Y	Y

COMMENTS: Loyalty patterns were mixed. Group D began Neutral while preferring Government and expecting the Government to win. After the Insurgent win in the engagement of Cycle 2, loyalty and winner preference remained the same, but Group D thought the Insurgent was winning. This conflict was resolved into complete Insurgent support because "the Government refuses any protection or sorely needed supplies and equipment." The arrival of a convincing administrator, a visit by the Government and no more visits from the Insurgents contributed to the switch to full Government support in Cycle 4. This general pattern was also followed by the other villagers with initial neutrality changing to some Insurgent support and followed by a strengthening of the Government position toward the end. Group R changed from Neutral to Government in Cycle 4 because the "Insurgents are doing nothing for us." They, in fact, had not visited the village for two consecutive cycles.

VILLAGE ORANGE

Cycle	1	2	3	4	5	6	7	8
Number Visiting					113			
Group		50						
Population	20	20	20	20	20	20	20	20
Loyalty G, N, I	N	N	N	N	N	N	N	N
Who is Winning	?	?	?	?	?	?	?	?
Winner Preference	?	?	?	?	?	?	?	?
Expected Game Length	?	?	?	?	?	?	?	?
No. Recruited								
No. Impressed								
No. Killed								
Who and how many in Ambush		20	20	20	20	20	20	20
Ambush Outcome (all casualties)								
Administrator?	Y	Y	Y	Y	Y	Y	Y	Y

COMMENTS: Loyalty statements appear to be closely related to the actions of the belligerents. Neutrality was expressed until the Government visit in cycle 2, when villagers were impressed and a relatively small force was left. After this action Government support was indicated and was reinforced because of "complete lack of contact with insurgents." However, when the Insurgents did finally visit in force and win the military engagement with the Government, the villagers felt that the insurgents were winning but still clung to Government loyalty and winner preference.

VILLAGE WHITE

Cycle	1	2	3	4	5	6	7	8
Number Visiting	I			75				
Group	100	35	35	96	11			
Population	100	100	100	100	100	100	100	100
Loyalty G, N, I	100	100	100	100	100	100	100	100
Who is Winning	75	75	75	75	75	75	75	75
Winner Preference	66	66	66	66	66	66	66	66
Expected Game Length	79	79	79	79	79	79	79	79
No. Recruited								
No. Impressed	100	100	100	100	100	100	100	100
No. Killed	1	1	1	1	1	1	1	1
Who and how many in Ambush	300	300	300	300	300	300	300	300
Ambush Outcome (all casualties)								
Administrator?	100	100	100	100	100	100	100	100

COMMENTS: The presence of government forces in the village for the first 3 cycles probably contributed to the shift from Neutral to Government loyalty statements. However, the outcome of the military engagement in favor of the Insurgent (cycle 4) seemed to produce increased uncertainty about who was winning and winner preference. Even though this action was followed by a large Government garrison, the recently expressed Government loyalty shifted back to Neutral. Since the players expected the game to continue for 5-6 more moves, they apparently felt no need to change from neutrality to be on the winning side. Even the Insurgent spy became doubtful of who might win until the cycle 4 engagement. He was finally discovered by the village chief on the last cycle.

VILLAGE <u>BROWN</u>		1	2	3	4	5	6	7	8
Cycle									
Number Visiting	I								
Group	G								
Population									
Loyalty G, N, I									
Who is Winning									
Winner Preference									
Expected Game Length									
No. Recruited									
No. Impressed									
No. Killed									
Who and how many in Ambush									
Ambush Outcome (all casualties)									
Administrator?									

COMMENTS: Village Brown was visited only once during the entire exercise. The Government was there in cycle 2 with a 25-man force, impressed 8, and left 20 in ambush for the remainder of the time. This action apparently produced a single-time estimation by Group R that the Government was winning and was the only change in an otherwise solid Neutral position for this village.

VILLAGE YELLOW		1	2	3	4	5	6	7	8
Cycle									
Number Visiting				73					
Group				25					
Population									
Loyalty G, N, I									
Who is Winning									
Winner Preference									
Expected Game Length									
No. Recruited									
No. Impressed									
No. Killed									
Who and how many in Ambush									
Ambush Outcome (all casualties)									
Administrator?									

COMMENTS: The small ambush the government left in this village and the impressment of eight villagers seems to have had little immediate effect on loyalty. Only Group C, whose family was impressed, showed any positive reaction to the Government's apparent strength. When the ambush was sprung in the third cycle, resulting in an overwhelming insurgent victory with severe village losses, a strong preference for the Government was expressed. The insurgents also impressed twenty-three villagers at this point. There was some confusion here about the 1:1 force effectiveness ratio, and two groups implied that they would not have betrayed the ambush had they understood this. When the village was visited by the Government in the last cycle, and all but seven of the population impressed, the strain of cross-pressure became clear. In fact, throughout the exercise, where winner preference differed from the belligerent believed to be winning, the villagers were unwilling to indicate loyalty for either side in 11 out of 17 instances.

C. Critiques

1. Number of critiques returned: 20, or about 1/2

Insurgents	4	high rate of return
Government	9	
Villagers	6	low rate of return
Control	1	

2. What aspect did you find most realistic?

- * (2) Terror and invasion
- (1) Need for strategy
- (6) Confusion and uncertainty
- (1) Efforts to gain loyalty
- (1) Pressure of time on planning a strategy
- (2) Effective role-playing by administrators and Insurgents
- (1) Gullibility of players
- (2) Some aspect of factual content
- (4) Unknown

3. What aspect did you find most un-realistic?

- (1) Psychological and economic aspects
- (3) Presence of Control and tabulation of results
- (3) Initial neutrality of villages and no descriptive scenario
- (7) Inadequate briefing
- (1) Methods of communication
- (1) "Clustering of group around a leader"
- (1) Lack of planning
- (1) Time pressure
- (3) Unknown

7. Did you become deeply involved in the action?

- (9) Yes
- (10) No Reason, when expressed: not enough action
- (1) (Played control)

8. Do you think the game was too short, about right, or too long?

15/21: "too short":

- (15) Too short
- (4) About right
- (1) Too long
- (1) Unknown

9. Do you think the game was too complex, about right or too simple?

10/20: "about right":

- (5) Too complex
- (10) About right
- (3) Too simple
- (1) Unknown

* Note: The numbers in parentheses indicate the number of responses of that type.

10. Do you think the teams had too few, about the right number, or too many players?

12/20: "about right":

- (2) Too few
- (12) About right
- (4) Too many
- (2) Unknown

11. How many times should a soldier play the game to exhaust its training possibilities?

7/20: "3"

- (2) Until trained

For training:

- (2) 0
- (3) Once
- (7) Three times
- (2) Ten times
- (1) Thirty times
- (3) Unknown

9&11. a) Only one player thought it too simple, but also thought it should be played more than three times for training.

b) Too complex/ more than 3 plays = 0 players

12. What did you find most confusing about the game?

- (11) Rules
- (1) Organization
- (11) Time cycle
- (1) Purpose
- (1) What was going on
- (2) Learning technique
- (1) Time taken in "combat situation"

13. What did you learn from the game that you did not already know?

10/20 felt they had learned something. Examples:

Impact of terror
Possibility of stifling communication
Complexity of the problem (3)
Need for better security
Human ability to adapt to situation
Cross pressure on villagers
Personal limitations as a leader
Role of spies, personnel losses from military action

14. Who would learn most from playing this game?

- (5) U.S. Government advisors and administrators
- (4) Anyone interested
- (1) Strategic decision makers
- (3) People involved in COIN
- (2) Military (advisors)
- (2) No one, in its present state
- (1) Sociology students
- (1) High school and Junior High students

15. What could be learned from observing many plays of the game?

(All 1, unless otherwise noted)

- a. Unknown (3)
- b. Psychological reactions and how to deal with them (2)
- c. Proper administration and organization (2)
- d. Facets of COIN operations
- e. Don't trust anyone
- f. Wide range of conditioned responses that could reduce decision making
- g. Value of experience
- h. Strategy (2)
- i. Inadequacy of set solution to solve seemingly similar problems (see f above for counter opinion)

16. How does the game compare with other training techniques?

- (5) Better than average
- (3) Good or average
- (4) Potentially good
- (4) Indifferent
- (2) Bad

17. How does the game compare with other research techniques?

- (2) Better than average
- (3) Good or average
- (1) Potentially good
- (1) Indifferent
- (3) Bad

Outstanding Comments:

- 1. Should not be played without a demonstration
- 2. "Poorly conceived and executed exercise. Not enough control. Insufficient briefing".
- 3. Questionable correlation with actual insurgency conditions
- 4. Agreement that loyalty is an "awesomely complex" problem
- 5. First move for villagers to contact belligerent
Belligerents should be given incomplete version of village scenario (Use of scenario came up frequently)
- 6. Much too limited in time. Should be at least one day.

CONCLUSIONS:

Future exercises should have:

1. An initial demonstration
2. A clear and lively briefing
3. Adequate participant preparation

AGILE-COIN DEMONSTRATION EXERCISE #3
The Infantry School, Fort Benning, Georgia
October 21, 22, 1965

A. Summary. Game #1

1. Failure of the Insurgents to gain the loyalty of any faction at any period of the game. (Insurgent spies were not designated in this game.)
2. Low population losses in two of the three villages.
3. Similarly, the winner preference, where stated, was pro-government, never pro-insurgent.
4. Inability of insurgents to mount successful hit and run ambushes.
5. Illustration of the Insurgent option of taking over a village by force and deposing the village chiefs.
6. Ability of the government to maintain administrators in villages more than half the time.
7. Remarkably little effort at recruitment and impressment in the villages.

B. Village Records

VILLAGE GREEN									
Cycle	1	2	3	4	5	6	7	8	
Number	7	(9)	24						
Visiting	G	52	50	41	70	45			
Group	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5			
Population	20 20 20 20 20	20 20 20 20 20	20 20 20 20 20	20 20 20 20 20	20 20 20 20 20	20 20 20 20 20	20 20 20 20 20	20 20 20 20 20	20 20 20 20 20
Loyalty G, N, I	G N G G G	G N G G G	G G G G G	G G G G G	G G G G G	G G G G G	G G G G G	G G G G G	G G G G G
Who is Winning	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G
Winner Preference	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G	G - G G G
Expected Game Length	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5
No. Recruited									
No. Impressed									
No. Killed									
Who and how many in Ambush									
Ambush Out-		3	8						
come (all		8	10						
casualties)									
Administrator?	Y X Y V	Y	Y	Y	Y	Y	Y	Y	Y

COMMENTS: At the end of the game, Village Green had the highest population and showed by far the strongest Government loyalty. Even during the first round, when the Insurgents deployed a 9-man force, 3/5 of the village thought the Government was winning and also deserved their loyalty.

No player at any time indicated Insurgent loyalty or preference. Only once, on the 8th move, did a player think that the Insurgents were winning (at which time he also changed his loyalty to neutral because of the 'removal of Government forces'). After the second cycle, winner preference was 100% Government; government loyalty over 90%; and government-winning estimates over 95%. The village chief correctly estimated the village's Government loyalties after every cycle.

The Government was successful in maintaining an Administrator in the village at all times. The Government began with a victory over a small insurgent force and proceeded to maintain large forces until later cycles. Late in the game, Green sent an ultimatum to the Government demanding more troop protection, or defection to the Insurgents would result.

Three loyalty shifts by one player indicated a predominant concern with the effects of Government forces: Shift to Neutral: "So much government interest, we are concerned about insurgent reaction." Shift to Government: Increased Government forces. Shift to Neutral: "Removal of government forces."

VILLAGE ORANGE

Cycle	1	2	3	4	5	6	7	8
Number	1			9				
Visiting	G	S	Y	Y	60	10	50	
Group	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
Population	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25
Loyalty G, N, I	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4	4 4 4 4
Who is winning	G	G	G	G	G	G	G	G
Winner Preference	G	G	G	G	G	G	G	G
Expected Game Length	3	6	6	6	6	6	6	6
No. Recruited								
No. Impressed								
No. Killed								
Who and how many in Ambush	55 G				60 G	70 G		
Ambush Outcome (all casualties)	G							
Administrator?	N/V	N/V	Y	Y	Y	N	N	N

COMMENTS: Village Orange finished the game with no losses in crossfire, recruitment or impressment.

Consistent with the population survival of this village - no casualties - Village Orange indicated no apparent winner, and no winner preference 75% of the time, the remaining 25 % being evaluations in favor of the Government.

All factions remained neutral on every cycle but one.

Large Government forces were stationed in the village early and late in the exercise, with administrators being maintained in the middle three moves. The villagers also pleaded with the government for more troop protection.

For the one case of a loyalty change - to temporary pro-government - the reason given was 'Insurgents not telling the truth.'

VILLAGE WHITE

Cycle	1	2	3	4	5	6	7	8
Number Visiting								
Group								
Population	1234	1234	112334	1234	1233	11233	1233	1233
Loyalty G, N, I	252525	23242323	21262326	21262326	21-23	21-23	21-23	21-23
Who is Winning	N	N	N	N	N	N	N	N
Winner Preference								
Expected Game Length	123	123	123	123	123	123	123	123
No. Recruited								
No. Impressed								
No. Killed								
Who and how many in Ambush								
Ambush Outcome (all casualties)								
Administrator?								

COMMENTS: The most dramatic game action occurred in Village White, when, after limited impressment, the Insurgents took over the village, installed a new leader, but were militarily defeated on the next move with only 6 Insurgents surviving. Two village chiefs were deposed.

The Government was unable to maintain an administrator in the early stages and after the Insurgents took over. Strength of Insurgent forces in the village was such that the Chief sent an ultimatum similar to that of Village Green, demanding troops, supplies, and weapons or the village would defect to the Insurgents.

Village loyalty was primarily neutral, but never pro-insurgent. Winner preference when indicated (30% of the time) was always pro-government.

Action was concentrated in Village White, with the population and government loyalties of the other villages remaining virtually intact.

There were several minor engagements, with the government usually successful due to distinct force advantages, but the primary battle was the game ending defeat of the Insurgents in Village White after they had taken it over. Crossfire losses were at a minimum in Villages Green and Orange, although Village White lost two village chiefs and control of its village.

C. Summary, Game #2

Ability of the government to obtain faction loyalties in only two villages.

Marked increase in Insurgent influence and loyalty over the previous game of October 21 (aided by the introduction of spies).

Generally high population losses, especially in villages Yellow and Brown.

Ambiguous role of the courier in tipping off the government on Insurgent deployments. (Courier movements have since been restricted to their team's move period.)

Marked inability of the government to maintain administrators in hostile villages.

Relatively few ambushes were attempted in the game, the two largest being in villages Green and Yellow. In small ambush confrontations, the Insurgents were usually the victors.

D. Village Records

VILLAGE WHITE

Cycle	1	2	3	4	5	6	7	8
Number	23	7	33					
Visiting	G							
Group	1123	11213	12133	12133	12133	12133	12133	12133
Population	323032	2	13	33	33	33	33	33
Loyalty G, N, I	1111	1	1	1	1	1	1	1
Who is Winning								
Winner Preference								
Expected Game Length								
No. Recruited								
No. Impressed	3132	32			10			
No. Killed	1111	1						
Who and how many in Ambush								
Ambush Outcome (all casualties)	G			10	10			
Administrator?	1111	1111	11	11	11	11	11	11

COMMENTS: White very hostile to Government and Administration early.

Large Government impressment - 20 from 3 on Move 2.

This village had a quite different view of the war than did the other villages. No faction at any time thought the Government was winning and none showed a preference for a Government victory. All cycles showed the village with a pre-dominant Insurgent loyalty.

Permanent population losses were relatively small, despite the large number of visits by both belligerents in force and a successful Insurgent counterambush of 10 Government troops.

The villagers were very hostile to the Government and the administrator very early in the game, and the government provoked their further fire by heavy, but temporary, troop impressment. It would appear that the greater government impressment and the successful insurgent engagement contributed to villagers perceiving government weakness. The village chief correctly estimated the village loyalty after each cycle.

VILLAGE ORANGE		1	2	3	4	5	6	7	8
Cycle									
Number Visiting Group	I	5	8						
	G								
Population		11	21	31	31	31	31	31	31
Loyalty G, N, I		25	30	30	30	30	30	30	30
Who is Winning		A	N	N	N	N	N	N	N
Winner Preference		I							
Expected Game Length		10	14	14	12	12	12	12	12
No. Recruited									
No. Impressed		5	5						
No. Killed									
Who and how many in Ambush					10	10			
Ambush Out-	G								
come (all casualties)	I								
Administrator?	V								

COMMENTS: Villagers either stated loyalty to neutrality or to the Insurgents (15% of the time). Factions complained that "Government troops were too highhanded" and that there were too few government forces in the area.

The insurgents were able to counterambush a government force successfully, with few losses, thus strengthening Insurgent loyalty in the latter cycles of the game.

One faction did perceive the Government as winning on moves 6 & 7, yet still desired an Insurgent victory.

The Government could maintain an administrator in the village only about half the time.

The village chief was successful in correctly estimating the predominant village loyalties.

Except for the Insurgent counterambush (killing 9 Government men), there was no significant military action in the village.

VILLAGE BROWN									
Cycle	1	2	3	4	5	6	7	8	
Number Visiting									
Group	I	G							
Population									
Loyalty G, N, I									
Who is Winning									
Winner Preference									
Expected Game Length									
No. Recruited									
No. Impressed									
No. Killed									
Who and how many in Ambush									
Ambush Outcome (all casualties)									
Administrator?									

COMMENTS: The Government visited early in force and impressed many villagers into service and as a result was perceived to be too oppressive by the villagers. Village population was down to 19 men by the 3rd cycle. On the 6th cycle, a single Insurgent arrived and quickly obtained 18 ready recruits, thus further depleting village population.

The number of visits with large forces made by the Government combined with only one Insurgent visit led the villagers to suspect that the Government was winning, while the predominant preferred winner was the Insurgents. No faction recorded Government loyalty; with two exceptions, the village was solidly pro-insurgent.

The villagers may have opened themselves up to harsh Government action by killing the Administrator after the first cycle.

At no time could the government keep an administrator in the village for a full cycle.

There were no major military engagements in the village area, except for two villagers killed by the Government on the first move as a terror tactic.

VILLAGE Green/Yellow

Cycle	1	2	3	4	5	6	7	8
Number Visiting	I 2			60		12		
Group	1 2 3 1 2 1 2 3 1 2 1 2 3 1 2 1 2 3 1 2	1 2 3 1 2 1 2 3 1 2 1 2 3 1 2 1 2 3 1 2	1 2 3 1 2 1 2 3 1 2 1 2 3 1 2 1 2 3 1 2	1 2 3 1 2 1 2 3 1 2 1 2 3 1 2 1 2 3 1 2	1 2 3 1 2 1 2 3 1 2 1 2 3 1 2 1 2 3 1 2	1 2 3 1 2 1 2 3 1 2 1 2 3 1 2 1 2 3 1 2	1 2 3 1 2 1 2 3 1 2 1 2 3 1 2 1 2 3 1 2	1 2 3 1 2 1 2 3 1 2 1 2 3 1 2 1 2 3 1 2
Population	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30	30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30 30
Loyalty G, N, I	N N I G N N I G N N I G N N I G N N I G N N I G	N N I G N N I G N N I G N N I G N N I G N N I G N N I G	N N I G N N I G N N I G N N I G N N I G N N I G N N I G N N I G	N N I G N N I G N N I G N N I G N N I G N N I G N N I G N N I G	N N I G N N I G N N I G N N I G N N I G N N I G N N I G N N I G	N N I G N N I G N N I G N N I G N N I G N N I G N N I G N N I G	N N I G N N I G N N I G N N I G N N I G N N I G N N I G N N I G	N N I G N N I G N N I G N N I G N N I G N N I G N N I G N N I G
Who is Winning								
Winner Preference								
Expected Game Length	41	3	2					
No. Recruited	10		5					
No. Impressed				4				
No. Killed								
Who and how many in Ambush				40 6	15 6			
Ambush Outcome (all casualties)	G							
Administrator?	N	V	V	V	V	V	V	V

COMMENTS: Green - the Insurgents visited early and recruited 10 men, but otherwise were generally inactive in this village.

The main population losses (which were relatively small) were due to impressment from both Government and Insurgents.

Initial winner preferences were undecided, until move 4 when the village began to perceive Government victory and also desire it. However, except for one faction's twice stating loyalty to the Insurgents and the village chief going pro-Government on the last two cycles, the village stated predominant neutral loyalty and tended not to speculate on game length.

Military activity was light with a progressive ambush buildup by the Government from 20 to 45 men finally leading to the interception of an Insurgent recon patrol of two men.

After the first round, the Government successfully maintained an administrator in the village at all times.

Only once did a faction indicate Insurgent preference.

The village chief tended to overestimate the amount of Government loyalty in the village. His was the only village faction showing government loyalty at any time.

(See next page for Yellow COMMENTS.)

VILLAGE: YELLOW

COMMENTS: Village Yellow loyalties began as neutral/pro-Government and later switched to solidly pro-Government. It was the battle ground of the sharpest engagement of the day, with a 60-man Insurgent ambush being counterambushed with only 6 survivors. In the ensuing crossfire, 26 villagers were killed.

Government forces were usually predominant in the village and the courier was very helpful to their cause in providing information on Insurgent ambush deployments, thus setting the stage for the Insurgent loss on Move 4.

The village was able to maintain an administrator at all times.

The village never indicated a preference for the Insurgents or thought they were winning at any time.

E. Critique Summary

There appeared to be some misunderstanding of game rules since over half the players in post-exercise critiques mentioned briefing, rules, and rule changes as the most confusing aspects of the game. Only two felt that the game itself was too complex once the rules were clarified. These comments probably apply primarily to the demonstration game since unclear rules seemed to have little influence in the last two game operations. About 25% of the respondents considered the game too simple, with the remainder satisfied with its level of complexity. 65% stated that they became deeply involved in the exercise.

The predominant feeling (75%) was that the game should be played about three times for teaching purposes. There was a wide range of opinions on who would learn most from the game and included: experienced conventionally trained soldiers, people with at least a rudimentary knowledge of insurgency, complete neophytes, AID representatives, NCO, Junior Officers, highly educated government and military officials. Opinions about the need for prior knowledge and experience in counterinsurgency operations were evenly divided 5-4. A significant middle-of-the-road opinion was persons "with limited knowledge of counterinsurgency, if ones experienced in counterinsurgency are also players".

Players varied in their estimates of the most unrealistic aspects of the game. Communications and the dual role of the Courier, restricted Insurgent activities, large losses by ambushing forces and lack of civic action, and psychological operations were some of the prime objections. (The movement of the couriers has since been restricted to the move of their teams.)

Significant learning outcomes revealed in the critiques included:

1. Realization of the danger of initiating attacks based on unverified intelligence.
2. The need for insurgents to avoid battles until they have adequate strength.
3. The difficulty of gaining loyalty.
4. The usefulness of intelligence and warning.
5. Differences in villager reactions to persuasion and coercion.
6. The serious consequences of not recognizing spies.

AGILE-COIN DEMONSTRATION EXERCISE #4
Mobile Command Headquarters, Montreal, Canada

January 17-19, 1966

The AGILE-COIN game was played over a three day period by officers at the Headquarters of the Canadian Mobile Command. On the first morning, the initial briefing was followed by a brief demonstration game, with accelerated time periods, in order to illustrate the mechanics of the exercise.

The afternoon and the whole of the following day were taken up with the three games which are reported here. The same officers took part in all the games, roles being reassigned so that all had the opportunity to play on the different teams.

Almost all of the players had had field experience in one or more U.N. or Commonwealth peacekeeping operation, including Palestine, Congo, Malaya, Cyprus and Lebanon.

A. Summary, Game #1

Government Strategy

The Government planned their strategy much more carefully than did the Insurgents. They entered each village in the first cycle with a moderate show of force and were able to defeat small Insurgent bands in ambush. They placed an Administrator in all but Green Village where they feared Insurgent loyalty. Believing the Chiefs of Green and Yellow villages to be spies, they arrested them and took them to headquarters. (The Chief at Green was not, in fact, a spy but had been agitating in favor of the Insurgents.) Having removed the most powerful disloyal factions, the Government was able to solidify support with large protective garrisons in each village. These were related in such a way that each village was held for all but one move, and the Government was able to create an impression of much greater strength than they actually had. This completely bewildered the Insurgents who were afraid to enter any village, lest they be badly defeated.

Insurgent Strategy

The Insurgents planned different strategies in each village. They attempted a "tough" policy for Green village from which they impressed 15 men with a moderate show of force. However, the token force they left behind was wiped out by the government, weakening the impression they had intended. They were able to defeat the Government in a small skirmish thereafter, and this aroused some support. In Orange Village they tried a much softer approach in which they entered the village with only a few men and were able to recruit ten. They did not return to this village until the end of the exercise when they were surprised by an ambush of government troops. Yellow village, in which the Insurgent spy was elected Chief, was completely ignored except for minor recruitment late in the exercise. Surprisingly, this village voiced the only Insurgent loyalty in the final tabulation. This was probably due to the skill and persuasiveness of the Chief. Early defeats in both Green and Orange frightened the Insurgents, and they left no more cadre in any village. They overestimated the size of the total Government force, and were wary of entering any village where there might be Government protection.

B. Village Records

VILLAGE GREEN

Cycle	1	2	3	4	5	6	7	8
Number	47	30	12		22			
Visiting	G							
Group	4C		12		31			
Population	39	23	20	20	20	20	20	20
Loyalty	G, N, I	N, I	I	I	I	I	I	I
Who is Winning	I	I	I	I	I	I	I	I
Winner Preference	N	N	I	I	I	I	I	I
Expected Game Length	45	34	33	12	12	12	12	12
No. Recruited								
No. Impressed	15	10	4					
No. Killed		23						
Who and how many in Ambush	21	10	30		31	(31)		
Ambush Out-	G	7						
come (all	2	3						
casualties)	C	5						
Administrator?	N	N	N	N	N	N	N	N

COMMENTS: During the first cycle both belligerents approached Green Village with moderate forces and succeeded in impressing ten to fifteen men. This display of force did not seem to have a significant effect on the loyalty of the villagers or their perceptions of who was winning. A small Government garrison left behind for protection was wiped out by an Insurgent band on the next move. This created a slight shifting of loyalty toward the Insurgents. The Government returned with a very large force, arresting the chief and impressing four men. At this point different loyalty problems seemed to develop. The faction of the village from which the Government had impressed still favored the Insurgents for a short time, but by the end of the exercise, the presence of a large protective force had solidified Government loyalty.

VILLAGE ORANGE

Cycle	1	2	3	4	5	6	7	8
Number Visiting	13	40				20		
Group	F B F	H B F	H B F	H B F	H D F	H B F		
Population	28 24 27	28 24 27	24 26 27	28 24 27	28 24 27	26 24 25		
Loyalty G, N, I	A G N	G G G	G G G	G G G	G G G	G G G		
Who is Winning	A G N	G G G	G G G	G G G	A G G	G G G		
Winner Preference	A G N	A G G	A G G	A G G	A G G	A G G		
Expected Game Length	? 6 ?	? 4 ?	? 3 ?	? 3 2	? 2 1	? 1 0		
No. Recruited	3 1 3							
No. Impressed								
No. Killed	3 3 3							
Who and how many in Ambush	13 I →	60 G →		50 G →				
Ambush Out-								
come (all casualties)	-4					-0		
	-12					-18		
Administrator?	4	Y	Y	Y	Y	-6		

COMMENTS: The Insurgents approached at the outset with a very small band led by a persuasive leader who managed to recruit ten men for training. These troops were left in cadre, but there were not enough of them to be effective. When the Government entered with a much larger force, they easily defeated the Insurgents and suffered only minor casualties themselves. The small garrison they left behind was augmented to sixty troops, as promised, the following day, making Orange Village a solid Government stronghold. Loyalty was shaken temporarily when the Government withdrew the garrison for a major attack, but was reinforced once again by the fulfillment of the promise to return them. Some concern was expressed at this point by one faction which feared that Orange was the only village loyal to the Government. The Insurgents, aware of the position of the village, were afraid to attack. When they finally did, at the end of the exercise, 90% of their incoming band was wiped out. Whatever doubts the villages might have had were completely arrested by the Insurgent defeat, and the exercise finished with solid backing for the government by Orange Village.

VILLAGE YELLOW

Cycle	1	2	3	4	5	6	7	8
Number Visiting	I			12				
Group	G			55				
Population	34	30	31	29	29	29		
Loyalty G, N, I	W P H	W P H	W P H	W P H	W P H	W P H		
Who is Winning	31 30 30	31 30 30	31 30 30	29 29 29	29 29 29	29 29 29		
Winner Preference	N N N	N N N	N N N	I N N	I N N	I N N		
Expected Game Length	N N N	N N N	N N N	I N N	I N N	I N N		
No. Recruited	3 3 3	3 3 3	3 3 3	3 3 3	3 3 3	3 3 3		
No. Impressed	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6	6 6 6		
No. Killed								
Who and how many in Ambush								
Ambush Outcome	106	666			206			
come (all casualties)	G	I						
Administrator?	N	Y	Y	N	Y	Y		

COMMENTS: The Government visited Yellow Village with a moderate force and recruited nine villages, leaving a very small garrison in ambush. The following day they returned with a larger force amplifying the cadre to sixty. The chief of the village, a spy for the Insurgent, resented their intrusion and began sending coded messages to his headquarters. The rest of the population, having suffered no losses through impressment or crossfire casualties, began supporting the Government. They were also aware of the Government garrison guarding Orange Village. Their loyalty was not even shaken when the Government withdrew its troops on the next visit, probably because they were told that the forces were needed for a large scale attack. As soon as the Government became aware of the chief's allegiance, they abducted him. Unknowningly, the Government assigned another spy to guard him. When the Government chief left headquarters, the two spies returned to the village - the village spy resuming his role as chief and the "Government" spy became the "administrator." The Government's failure to fulfill certain promises (returning men, harvesting crops, etc.) weakened loyalty for a time, but a slight show of force, in the form of a small garrison, renewed faith in their cause in at least one faction. The third faction, which vacillated between the Government and the Insurgents throughout the exercise, was finally persuaded by the chief to support the Insurgents. The game ended with loyalties being divided and no one, not even the spy, knowing who was really winning.

C. Summary, Game #2

Government Strategy

The Government suffered badly from the election of Insurgent spies as Village Chiefs. The three large ambushes they set in Orange and Green were betrayed to the Insurgents who, with surprise in their favor, were able to defeat them easily. The persuasive power of these spies contributed to their inability to win the loyalty of the villagers. The only village in which they were successful was Yellow, where the single faction leaning toward the Insurgents was arrested. Were it not for the men the Government was able to get from Yellow, their force would have been reduced to 10 men by the end of the game. Even with these recruits, their final force strength was only one quarter its original size. Had the Government not arrested the disloyal faction of Yellow, there would have been a decisive Insurgent victory.

Insurgent Strategy

The Insurgents suffered nearly disastrous losses in the first cycle of the game. Their recovery was due partly to their skillful recruitment and impressment of villagers and partly to their effective utilization of good intelligence information. In addition to the twelve recruits and twenty-five impressed villagers from Orange and Yellow, the entire Green village defected to the Insurgent side. Their most significant maneuver was three successive attacks on Government headquarters. The first occurred during the sixth cycle in which they attacked Headquarters while the Government was away. There were few casualties in this engagement, but a total of 57 Government losses, or about one third of their original force in subsequent attacks. Despite their own losses in the large engagements in Government Headquarters, the Insurgents were able to build up their force with trained recruits. Had they been able to prevent the arrest of their supporter in Yellow Village, or win the loyalty of some other faction, there would have been a decisive Insurgent victory.

D. Village Records
VILLAGE YELLOW

Cycle	1	2	3	4	5	6	7	8
Number Visiting	Y8	DECON						
Group	75							
Population 33, 33, 34	H G C	H G C	H G C	H G C	RECON	57	18	60
Loyalty G, N, I	21 22 12	21 22 12	21 22 12	21 22 12	21 22 12	21	15	15
Who is Winning	N M G	G C C	G N G	G N G	N N G	G	G	G
Winner Preference	G G G	C C C	C N G	G N G	G I G	G	G	G
Expected Game Length	G N G	G C C	G N G	G N G	G N G	G	G	G
No. Recruited	76 4	? 2 3	? 3 2	1 2 1	1 2 1	1	2	1
No. Impressed	I I I					5		
No. Killed	40 3 10					6		
Who and how many in Ambush	I 60	6 50 → (50)	(6)					
Ambush Outcome (all casualties)	-6							
Administrator?	NB	YES	YES	NO	NO	YES	YES	NO

COMMENTS: Yellow Village was approached by large forces of Insurgent and Government troops in the first cycle of the game. The Insurgents left a strong band in ambush, but were betrayed by the villagers. The Government was able to counterambush and wiped out more than half of their entire force. In the following cycle, an Insurgent recon visit revealed a garrison of 50 Government troops. Believing throughout the exercise that the village was highly fortified, the Insurgents never returned until the final cycle. They hoped then to defeat the Government garrison but they had pulled out long ago. The Government's early display of strength and the Insurgents' fear of defeat here confirmed Government loyalty in this village. The only dissident faction in the village was believed, by the Government, to be an Insurgent spy. In fact, he was not, but was arrested anyway. His capture prevented the Insurgents from gaining any loyalty in this village, thereby preventing a sure victory for their cause.

VILLAGE ORANGE									
Cycle	1	2	3	4	5	6	7	8	
Number Visiting	I		50	40	41			6	
Group	20	50	30	40	33				
Population 33, 34, 35	28, 28, 27	28, 28, 27	23, 23, 24	23, 23, 24	41, 27	41, 27	11, 25, 27	11, 25, 27	
Loyalty G, N, I	I, I, N	I, I, N	I, I, N	I, I, N	I, I, N	I, I, N	I, I, N	I, I, N	
Who is Winning	N, G, N	N, I, N	N, I, N	N, I, N	I, I, N	I, I, N	I, I, N	I, I, N	
Winner Preference	N, I, G	N, I, G	N, I, G	N, I, G	I, I, G	I, I, G	I, I, G	I, I, G	
Expected Game Length	5:20	4:19	3:18	3:27	2:16	2:15	2:14	2:15	
No. Recruited	4								
No. Impressed	3								
No. Killed					2				
Who and how many in Ambush		50 G		40 G					
Ambush Out-	G		- 45		- 36				
come (all casualties)	I		- 20		- 16				
Administrator?	N	YES	ARM KILLED	YES	ARM KILLED	NO	NO	NO	

COMMENTS: The Insurgents carried on a successful recruitment campaign in Orange Village, aided by the Insurgent spy who was elected village chief. The Government left a large garrison in ambush which was betrayed to the Insurgents by the chief. Intelligence information allowed the Insurgents to counterambush the Government troops, causing severe losses to the Government team. At the same time the Insurgents killed the Village Administrator and returned the recruits they had trained. The Government countered this show of force by replacing the administrator, re-establishing the garrison and arresting the village chief. The latter was not accomplished before the Insurgents had once again been informed of the Government troops, and shortly thereafter the Government suffered another severe loss. The chief was released with the Insurgent attack on Government headquarters. Loyalty (within each faction) was fairly consistent throughout the game. Two factions favored the Insurgents from the start, while the third vacillated between Government support and neutrality. The exercise ended with the third faction as a confused neutral.

VILLAGE GREEN

Cycle	1	2	3	4	5	6	7	8
Number	I	30		54	25			
Visiting	G							
Group	50			50				
Population	32, 34	23, 24, 25	23	42	24			
Loyalty	G, N, I	I, N, I	I, N	I, N	I, N			
Who is Winning		I, N, I	I, N	I, N	I, N			
Winner Preference		I, N, I	I, N	I, N	I, N			
Expected Game Length		5, 4, 4	3	?				
No. Recruited								
No. Impressed								
No. Killed								
Who and how many in Ambush		11, 2		4				
Ambush Out-								
come (all								
casualties)								
Administrator?								

COMMENTS: In the first cycle the village chief, a spy for the Insurgents, argued that the villagers should buy protection from the Insurgents by volunteering a small force. When a representative of the Insurgents visited reproaching the chief for being a wealthy landowner, he was persuasive enough to get twelve volunteers. On receiving thereafter one faction of the village defected to the Insurgents with all of his men. True to their word, the Insurgents returned the villagers' recruits as trained soldiers. The Government, now realizing that all of their ambushes had been betrayed by the chief, abducted him. This angered the third village faction who defected to Insurgent Headquarters with his and the Chief's men, just as the second faction returned with his own men trained. By now, the village was completely garrisoned with Insurgent troops, but there were no villagers to protect. The entire village had defected to the Insurgent side, and the Insurgents removed their troops to more strategic locations.

E. Summary, Game #3

Government Strategy

The Government's first and most decisive mistake was to move their headquarters into the Yellow Village. Evidently they hoped to increase the size of their forces by taking over the village, but they miscalculated the location and effectiveness of the Insurgent spies. Furthermore, the villagers resented their intrusion, and after one massive engagement, in which 25 villagers were killed in crossfire, the entire village supported the Insurgents. Their relocation in Orange was no more successful. When the Orange Chief defected to the Insurgents and betrayed the size and location of the Government force, another bloody battle ensued. One more crushing defeat of the remainder of their troops in Yellow forced the Government to take to the hills with the only loyal faction from Orange. They stayed in Hiding for two cycles, training their few recruits, but by the time they returned the Insurgents were in the process of taking over the region. Realizing there was no hope of victory, the two forces negotiated and established a coalition government.

Insurgent Strategy

The Insurgents held to a policy of recruitment rather than impressment throughout the exercise. This, combined with the persuasiveness of their spies, helped to strengthen loyalty to their cause. They never left a single garrison in a village, but attacked only when they had positive information on the size and location of the Government force and were able to counterambush. The Government's four major defeats convinced the villagers that the Insurgents were winning, and by the end of the game they had fulfilled all the necessary criteria for victory.

Unlike most previous games, the Insurgent activity was determined by the strategy of the Government. Had the government not chose to move their headquarters, the Insurgents would probably have had to pursue a more aggressive policy.

F. Village Records

VILLAGE GREEN

Cycle	1	2	3	4	5	6	7	8
Number Visiting	I	I	134			11		
Group	50	56						
Population 34, 33, 33	M W P	M W P	M W P	M W P	M W P	M W P		
Loyalty G, N, I	28 27 27	26 25 25	20 20 20	20 20 20	20 20 20	19 18 18		
Who is Winning	I N I	I N I	I N I	I N I	I N I	I N I		
Winner Preference	N N N	I N I	I I I	I I I	I I I	I I I		
Expected Game Length	I I I	I I I	I I I	I I I	I I I	I I I		
	7 7 5	5 4 4	2 3 3	1 2 2	1 3 1	1 2 1		
Nc. Recruited	I I I	I I I	I I I			I I I		
	2 2 2	2 2 2	5 5 5			5 5 5		
No. Impressed	C G G							
	4 4 4							
No. Killed			2 1 1					
Who and how many in Ambush			(56 G)					
Ambush Outcome		56 G						
Income (all casualties)			50					
			13					
Administrator?	NO	NO	4			NO		

COMMENTS: The Insurgents carried on a very successful recruitment campaign in Green Village. During the first 3 cycles, they were able to persuade 27 villages as a sign of their trustworthiness. The only major battle in Green village was betrayed by the chief, an Insurgent spy, and resulted in severe Government losses equivalent to one-third its entire force. Toward the end of the game, the village played a critical role in determining the outcome. A decisive victory for the Insurgents depended on a plurality vote of the entire village population, and this was not achieved until the last cycle.

VILLAGE YELLOW		1	2	3	4	5	6	7	8
Cycle									
Number Visiting	I	1	6	125		87	82		
Group	G		99 (ALL)	54 (HOME BASE)	46 (HOME BASE)				
		L B2 B3	L B2 B3	L B2 B3	L B2 B3	L B2 B3	L B2 B3		
Population 34,33,33		29 32 26	25 29 23	17 20 15	17 20 15	8 11 16	9 12 17		
Loyalty G, N, I		I H N	I G N	I N I	I N I	I H I	I I I		
Who is Winning		I N G	I N G	I I I	I I I	I I I	I I I		
Winner Preference		I N N	I G N	I G I	I N I	I N I	I N I		
Expected Game Length		7 7 8	2 7 1	2 7 5	1 7 4	1 7 3	7 7 2		
No. Recruited		I I I	6 6 6			I I			
No. Impressed		5 1 7	4 3 3			10 10			
No. Killed				8 9 8		1 1 1			
Who and how many in Ambush			99 G	54 G	46 G	87 G	82 G		
Ambush Out-	G			-49		-56			
come (all casualties)	I			-24		-9			
Administrator?	V			-25		-3			
		YES	ALL GOVT	ALL GOVT	YES	NO	NO		

COMMENTS: The major action of the game took place in Yellow Village. In the second cycle, the Government moved its Headquarters and all available troops into Yellow Village. This was a poor choice of location, since the Chief of this village was a spy for the Insurgents. His informing was so discreet and his strategy so well executed that not even his fellow villagers recognized his identity. As soon as the Insurgents became aware of the government's location, they attacked in full force. This occurred during a Government move, and nearly all of the troops left at home guarding recruits were killed. There were also substantial crossfire losses to the village. During the fourth cycle the Government moved to new headquarters, leaving behind a large cadre, but returned shortly thereafter with Orange Village which had disbanded and joined the Government. Upon its return the Insurgents surprised them with a counterambush, reducing the Government's population to 7 from 160.

VILLAGE ORANGE

Cycle	1	2	3	4	5	6	7	8
Number	78			116				
Visiting	G							
Group	F B C	F B C	F B C	F B C				
Population 34, 33, 33	21/20/20	20/20/20	39/20	33/17				
Loyalty G, N, I	N N N	I I N	N N	G ?				
Who is Winning	N N N	N N G	N G	I ?				
Winner Preference	N N N	I I G	N G	G ?				
Expected Game Length	? ? ?	? ? ?	? ?	2 ?				
No. Recruited	1/3/3/4							
No. Impressed	9/9/8							
No. Killed				63				
Who and how many in Ambush	25 →	(26)	75G	81G				
Ambush Out-								
come (all				-35				
casualties)				-24				
Administrator?	YES	YES	YES	-9				

COMMENTS: In the first cycle, the Insurgents, through both recruitment and impressment, were able to get 29 men from Orange Village. The Government, on the other hand, had no success whatsoever. In the third cycle, they killed the chief whom they believed to be a spy. In fact, he was not, and they so alienated the villagers that they began leaning toward the Insurgents. In the third cycle, Orange was visited by the Government who abducted the dissident faction of the village and left a large garrison. By the process of elimination, the Insurgents were able to find the Government, which by this time had established Headquarters in Orange. They launched a massive attack resulting in heavy Government casualties, and some village crossfire losses. During the attack, the ruling family defected to the Insurgent side (they had been badly treated by the Government administrator) and the rest of the village disbanded and turned their men over the government. In the last play of the game, Orange Village was re-established under the new government.

G. Critiques

Numbers on left refer to question numbers on critique form. Numbers in brackets indicate number of responses of that type. There was a total of 15 respondents.

2. Most realistic aspect:

Uncertainty	(2)
Pressures and demands of belligerents	(2)
Terror and intrigue	(3)
Problem of interpreting intelligence	(3)
Volatility of events	(1)
Competition and cooperation among groups	(1)

3. Most unrealistic aspect:

Too much communication between villages	(1)
Too little communication between villages	(1)
"Assumption that economics and ideology are irrelevant"	(2)
Inability of villagers to fight on their own as effectively as belligerents	(2)
Dealings between government and villagers	(5)

7. Involvement:

High	(11)
Moderate	(1)
Low	(1)
No answer	(2)

8. Length of game:

Too short	(3)
About right	(10)
Too long	(1)
No answer	(1)

9. Complexity

Too complex	(1)
About right	(9)
Too simple	(4)
No answer	(1)

10. Team Size:

Too few	(1)
About right	(13)
Too many	(0)
No answer	(1)
11. Times to be played:

Once	(1)
Three times	(4)
Ten Times	(8)
Thirty times	(1)
No answer	(1)
12. Most confusing aspect:

Rules	(7)
Message security	(1)
Nothing	(1)
13. Those who would learn most from game:

All those concerned with the problem of insurgency	(3)
Field grade officers	(7)
Politicians	(1)
14. Lessons to be learned from the game:

Decision between alternative strategies	(1)
Complexity of total situation	(3)
Human factors	(4)
Political factors	(2)
15. Comparison with other training techniques:

Better	(0)
Same	(1)
Worse	(1)
Don't know	(13)
16. Comparison with other research techniques:

Better	(0)
Same	(1)
Worse	(1)
Don't know	(13)
17. Suggested improvements:

Should be situation-specific and/or area specific	(7)
Should include UN peace force	(3)
Villagers information input is too little to be accurate	
Casualty calculation somewhat artificial, but necessarily so.	

AGILE-COIN DEMONSTRATION EXERCISE #5

U.S. Air Force Academy, Colorado Springs, Colorado
January 26, 1966

A. Summary, Game #1

Two demonstrations of the AGILE-COIN game were held at the United States Air Force Academy in Colorado Springs, Colorado, on January 26, 1966. Participants in the morning game were military officers -- instructors at the Academy. The afternoon demonstration included both officers and cadets.

The first demonstration resulted in a tentative victory for the insurgents, who succeeded in reducing government military superiority and in securing either loyalty or neutrality from most of the villagers who survived in this very bloody game. A spy in the government headquarters and in Green village provided the insurgents with intelligence which proved invaluable in their operations.

Brown and Yellow were firmly pro-government in the first cycle, while Green was neutral with an eventual pro-insurgent bias, due in large measure to the presence of a clandestine insurgent infrastructure in the village. This insurgent agent caused considerable difficulty for the government by spreading false rumors through notes to the other villages, as well as by gathering intelligence for the insurgents.

Yellow's loyalty moved away from pro-government to neutral as soon as the government garrison was withdrawn during the second cycle, a pattern which Yellow was to follow throughout the game. Green, meanwhile, moved closer to the insurgent camp while Brown remained firmly pro-Government. No military action took place during this cycle.

During the third cycle, however, the government ran a successful ambush in Yellow, inflicting fourteen casualties on a sixteen-man insurgent force. Village cross-fire losses were heavy - twelve dead - causing the village to adopt a neutral attitude once again.

Neutrality appeared even more attractive to the Yellow village during the fourth cycle, when a fifty-man government unit whose numbers and deployment had been betrayed by an insurgent spy in the government headquarters was decimated by the insurgents, who had not been warned by the villagers. The insurgents also carried off a successful ambush in Green village during the fourth cycle at a cost of thirteen troops to the government. All in all, the government lost fifty-eight troops - almost a third of its total force - during this disastrous fourth cycle.

Government fortunes did not improve on the fifth cycle. The insurgents failed to make contact with a large ambush set in Yellow, while the presence of an ambush in Brown was betrayed by its large size. In Green, the government walked into yet another insurgent trap which the villagers had once more failed to betray. Government officials finally decided that what they considered treachery on Green's part was intolerable. They were angry enough to incur losses by taking a force out at night in order to annihilate the pro-insurgent villagers. The whole population of Green village was massacred.

This ruthless action might have at least enabled the government to strengthen its position by having fewer static points to defend with a stronghold in pro-government Brown. Government forces had already been seriously reduced by insurgent action, however, and at this point, the insurgent spy on the government team conveyed the information that government headquarters itself was lightly defended. The insurgents proceeded to mount an audacious attack and to capture the government center. The game ended here with the insurgents evidently in a position to take power.

B. Village Records

VILLAGE YELLOW

Cycle	1	2	3	4	5	6	7	8
Number Visiting	13		20	13				
Group	HIC W	HIC W	HIC W	HIC W	HIC W			
Population	251523	241523	20119	7127	8168			
Loyalty G, N, I	6166	N N N	6 6 6	N N N	11 11 11			
Who is Winning		6 6 6	6 6 6	7 7 7	7 7 7			
Winner Preference		6 6 6	6 6 6	6 6 6	6 6 6			
Expected Game Length		3 Y 3	3	1 2 2	1 2 2			
No. Recruited	16 10 10							
No. Impressed	8			7 4 7				
No. Killed			4 4 4	6 5 5	11 11			
Who and how many in Ambush	40 G	40 G withdrawn	16 I	50 G betrayed	36 G			
Ambush Out-			4	45				
come (all casualties)			14	7				
Administrator?	Y(2)	Y	N	Y	N			

2
1
5
1

COMMENTS: Yellow Village was remarkable for the unanimity of its members, though its population was greatly reduced by the time the game was ended, and its neutrality could not have made it a "winner."

The Government entered in force in the first cycle, recruited quite heavily, and left a large force in control - with the result that the village was firmly loyal to the Government. When the administrator and the troops were withdrawn in cycle 2, loyalty immediately switched to neutral, but moved back to the Government when an insurgent ambush was overwhelmed in cycle 3. The large Government ambush left in the village was betrayed by the insurgent spy system, and destroyed by an insurgent attack in cycle 4. Loyalty jumped uniformly back to neutral, with all members reporting a prediction of insurgent victory, but a preference for Government victory. In the last cycle (5), one of the villagers was abducted by the insurgents, and a Government ambush set up, when the game was ended. The quite heavy cross-fire losses from the engagements in cycles 3 and 4 did not apparently deter the villagers from accepting a further Government force in cycle 5.

The reasons given for loyalty shifts indicate a clearly overriding concern with the presence of "protective" troops.

VILLAGE BROWN

Cycle	1	2	3	4	5	6	7	8
Number Visiting		49	35	1	1			
Group	2			35	12			
Population	22 20 20	22 20 20	20 20 20	18 18 18	17 17 17			
Loyalty G, N, I	3 2 2	2 2 2	2 2 2	2 2 2	2 2 2			
Who is Winning	G	G	G	G	G			
Winner Preference	G	G	G	G	G			
Expected Game Length	7	10	5 4 7	3 3 3	1 2			
No. Recruited	4 5 5			2 2 2	1 1 1			
No. Impressed	8 8 8							
No. Killed								
Who and how many in Ambush								
Ambush Out-			251	256	256	376		
come (all casualties)								
Administrator?	N	N	Y	Y	Y			

COMMENTS: Brown Village maintained its population size well, and ended up completely loyal to the Government.

The village started more or less pro-Government, and gradually shifted to being entirely neutral, owing to the Government's refusal to fulfill a promise to station troops there. The placing of an insurgent ambush in cycle 3 had little effect but its removal in cycle 4 shifted loyalties back towards the Government, a trend confirmed when the Government ambush set in cycle 4 shot down a lone visiting insurgent in cycle 5. The village accepted a 12-man increase in the Government ambush (having suffered no crossfire losses in the overwhelmingly successful ambush), but the game ended before this ambush could be effective.

In commenting on their loyalty shifts, villagers were primarily motivated by the Government's initial failure to station a "protective" force, and then later fulfillment of this promise.

VILLAGE GREEN

Cycle	1	2	3	4	5	6	7	8
Number Visiting	I	I	I	I	I	I	I	I
Group	G	G	G	G	G	G	G	G
Population	29	29	29	29	29	29	29	29
Loyalty	G, N, I	G, N, I	G, N, I	G, N, I	G, N, I	G, N, I	G, N, I	G, N, I
Who is Winning	I	I	I	I	I	I	I	I
Winner Preference	G	G	G	G	G	G	G	G
Expected Game Length	15	3	1	3	1	3	1	3
No. Recruited	5	5	5	5	5	5	5	5
No. Impressed								
No. Killed								
Who and how many in Ambush								
Ambush Out-								
come (all casualties)	G	I	I	I	I	I	I	I
Administrator?	V	V	V	V	V	V	V	V

COMMENTS: Green Village was well on the way to being the one with the largest population remaining, but was instead completely wiped out by the Government right at the end of the game.

During the first cycle, all the villagers offered recruits to the Insurgents - some of whom were returned in cycle 3. This return of men clearly swung village loyalty to the Insurgents, a feeling reinforced by the Insurgents' successful ambush in cycle 4, and by the presence of an Insurgent spy.

The Government visited the village regularly, but failed to leave troops. Having been ambushed in cycle 4 and again in cycle 5 (the latter time, however, in overwhelming strength), the Government's final act was to annihilate the village completely in revenge for Insurgent loyalties, even travelling at night and accepting an "overtime" loss to do so.

C. Summary, Game #2

The afternoon demonstration, which included both instructors and cadets as participants, resulted in a stalemate with the government in a relatively favorable position to gain ultimate victory. A major reason for government success was that the insurgents lacked a unified command structure and were consequently unable to implement a consistent strategy. Secondly, the insurgents' intelligence network was considerably less efficient in the afternoon than it had been in the morning game.

Impressments were rather light in the first cycle and there were no military engagements. Most villagers registered neutrality as between the belligerents though the government had a stronghold in Yellow and there was some pro-Insurgent sympathy in politically volatile Orange. The village chief in Brown, a strong leader who kept his population behind him throughout the simulation, was pro-government even though most of his people would have preferred neutrality.

His hold on the population was put to a serious test on the second night when a nine-man government ambush force was overrun by forty-seven insurgents. The insurgents took revenge on the village for having failed to betray the ambush by executing two people from each family and three from the village chief's family. They decimated the population further by impressing four men from each family for a total of twelve. Including those villagers killed in the cross-fire and the twenty-four men who had been recruited by the Government on the first move, Brown had now lost fifty-four men, over half of its population. The village chief nonetheless remained staunchly pro-government and the people supported him when the government sent in a larger force to protect the survivors. This force successfully ambushed and annihilated a small insurgent party which visited Brown the next night, but three more villagers were killed in the cross-fire and the government saw fit to recruit fifteen more men for the army.

The insurgents reached their peak strength in the third cycle as their first cycle draftees went into action. Here, they missed a chance to inflict severe casualties on a government ambush position in Orange whose

members and deployment had been betrayed by a pro-insurgent villager. Instead of a large counter-ambush, they contented themselves with sending a very small force which was able to cause only minor damage to the surprised enemy. They attempted to correct their error in cycle 4 with a larger attack, but the Government had reinforced its position meanwhile, and defeated the counter-ambush. The Insurgents returned once again, and this time were successful in defeating the now reduced Government garrison. The Insurgents had however suffered a second major defeat in Yellow during cycle 4, and their force level was at a dangerously low level when the game ended.

Meanwhile, in cycle 4, Brown village agreed with the government that it would be much easier to provide protection were the villagers to pull up stakes and go to Green as refugees. This was done in spite of protests from Green, a move which made security much easier for government forces in that there were now only three villages to defend. Green, however, now began to have more sympathy with the insurgents because the villagers suspected (rightly) that the government hoped to install the pro-government Brown village chief as leader of the consolidated villages. Since the Green village chief was sympathetic to the insurgents all along, he had political as well as personal reasons for stirring up the Green villagers against the interlopers from Brown.

The insurgents, their numbers reduced by successful government operations, were in the process of drafting large numbers of villagers to fill out their ranks again when the game ended. Village loyalties were divided - Yellow remained pro-government, Orange was split down the middle with half of the population favoring either side, and Green's swing toward the insurgents was at least partially nullified by the presence of the pro-government Brown refugees in their midst. By the end, even the majority of the pro-insurgent population had to concede that the government was winning.

D. Village Records

VILLAGE BROWN

Cycle	1	2	3	4	5	6	7	8
Nr. ber	47	47	3	5	2			
Visiting	IC	3	50	2	40			
Group	EIBO	EIBO	EIBO	EIBO	EIBO	EIBO		
Population	260525	181718	61415	41213	11413			
Loyalty G, N, I	GAN	6612	6612	6612	6612			
Who is Winning	I	611	611	611	611			
Winner Preference	665	666	666	666	666			
Expected Game Length	4420	4318	3216	26	210			
No. Recruited	888							
No. Impressed		444	1122					
No. Killed		443	111	222	4212			
Who and how many in Ambush	96	126	346					
Ambush Outcome (all casualties)	G	9	3	Villagers move to Green Village				
Administrator?	V	11	3	(6 die on the way)				

COMMENTS: Brown Village had a chief a highly pro-Government individual, who clearly dominated the other villagers.

The Government left a 9-man ambush in cycle 1 which was overwhelmed by the Insurgents in the following cycle, with several villagers being killed by the victors in reprisal for not betraying the Government presence. Loyalty to the Government was, if anything, strengthened however, and a small addition made to the Government force. Thus the small Insurgent force entering in cycle 3 was totally wiped out, and the Government ambush was further reinforced.

At this point, the Village Chief agreed with the Government leader that he would move his whole village as refugees to Green Village, thus easing the Government's task of protecting the population. The pattern of loyalty established earlier (two pro-Government, one neutral) was maintained after the move. The chief was invited to Government headquarters, where a plot was formed to depose the existing Chief of Green Village, but the game ended before this could be attempted.

VILLAGE GREEN								
Cycle	1	2	3	4	5	6	7	8
Number Visiting	2	1		5	2			
Group	R M S T	R M S T	R M S T	R M S T	R M S T	R M S T		
Population	23 23 23 23	23 23 23 23	19 19 19 19	19 19 19 19	38 38	20 20 20 19		
Loyalty G, N, I	N N N N	N G N N	N T N N	N I G G	N G	I I I G		
Who is Winning	G	G	T I G	G T G G	I I G	G I G		
Winner Preference	G	G	T I G	N T G G	I I G	I I G		
Expected Game Length	3 10	10 2 10	2	5 2 8	1 4	1 1 1		
No Recruited			4 4 4 4					
No. Impressed	2 2 2 2							
No. Killed						30 G		
Who and how many in Ambush						Refugees from Orange		
Ambush Outcome (all casualties)						Refugees are in the		
Administrator?	✓	✓	N	N	N	N		

COMMENTS: Green Village maintained its population remarkably well, largely because very little action took place there. The course of the game saw a shift of loyalty first toward the Government and later toward the Insurgents, based rather on negative feelings for one side than on positive support for the other.

There were no engagements in the village throughout the game. In cycle 5, the inhabitants of Orange Village moved in as refugees. Green villagers regarded them with suspicion as Government spies and were planning to massacre them or have them impressed by the Insurgents when the game ended.

Loyalty shifts were reported as motivated by perception of who was winning, though this is not borne out well in the records.

VILLAGE YELLOW

Cycle	1	2	3	4	5	6	7	8
Number Visiting	I			35				
Group	25	2	10	60				
Population	A C H L	A C H L	A C H L	A C H L	A C H L	A C H L		
Loyalty G, N, I	23 21 23 23	21 20 22 22	20 19 21 20	16 14 16 15	17 15 16 16	17 15 16 16		
Who is Winning	G G G N	G G G G	G G G G	G G G G	G G G G	G G G G		
Winner Preference	G G G	G G G	G G G G	G G G G	G G G G	G G G G		
Expected Game Length	3 8 2 6	2 6 4 5	2 5 4 4	1 4 4 2	3 4 4 2	1 4 4 1		
No. Recruited								
No. Impressed	2 4 2 2	2 1 1 1	1 1 1 2	2 4 3 3				
No. Killed				2 2 2 2				
Who and how many in Ambush	25 G	25 G	2 withdrawn	30 I				
Ambush Outcome (all casualties)	G			4				
Administrator?	N	Y	Y	Y	Y	Y		

COMMENTS: Yellow Village was solidly pro-Government throughout the whole game; the one engagement in the village saw an Insurgent ambush betrayed and soundly defeated by the Government.

The initial predisposition in favor of the Government seems related to the stationing in the village of "protective" forces, and to a belief (no doubt encouraged by the Government) that Insurgent forces were very small.

N.B.: This record was reconstructed from an incomplete village umpire record, loyalty forms, messages and central control records.

VILLAGE ORANGE									
Cycle	1	2	3	4	5	6	7	8	
Number Visiting	I	I	2	25	45				
Group	AICHP	AICHP	AICHP	AICHP	AICHP	AICHP			
Population	25 25 25	21 21 21	21 20 20	18 17 17	15 14 14	12 11 11			
Loyalty G, N, I	A I I N	N I I G	G I I G	G I I G	G I I G	G I I G			
Who is Winning	G I	G I	G I	G I	G I	G I			
Winner Preference	I G I	I G I	I G I	I G I	I G I	I G I			
Expected Game Length	6	5 7	4 5	2 4 3	2 2	2 5 2			
No. Recruited									
No. Impressed		4 4 4			7 5 5				
No. Killed			1 1 1	3 3 3	3 3 3				
Who and how many in Ambush		25 G	50 G	30 G					
Ambush Outcome (all casualties)	G		4	6	27				
Administrator?	N	Y	Y	Y	Y	N			

2159

COMMENTS: Orange Village was the scene of much of the game's action, and loyalties polarized (though by no means uniformly) as battle outcomes emerged.

The Government early posted a force of 25 men in the village; the Insurgents were informed of the ambush, but sent only two men in cycle 3 to snipe and withdraw. The Government reinforced its position, bringing strength up to 50 men, so that with due warning it overwhelmed the larger Insurgent force sent to attack it in cycle 4. At this point, three of the four villagers declared themselves loyal to the Government, and the fourth admitted that the Government was winning. In Cycle 5, however, a large Insurgent force returned to surprise the now-reduced Government garrison, and gained a substantial victory. The Insurgents then impressed heavily among the surviving villagers. The engagement had the effect of confusing the villagers' perception of the winning side, and of polarizing loyalties into two pro-Government and two pro-Insurgent. The substantial crossfire losses sustained in Orange Village do not appear to have affected loyalties one way or the other.

14

E. Critiques

Numbers on left refer to question numbers on critique form.
Numbers in brackets indicate number of responses of that type. There were a total of 25 respondents (9 officers and 16 cadets).

2. Most realistic aspect:

Uncertainty	(5)
Pressures and demands of belligerents	(5)
Terror and intrigue	(3)
Problem of interpreting intelligence	(2)
Loss ratios	(1)
Volatility of events	(1)
Competition and cooperation among groups	(1)

3. Most unrealistic aspect:

Too little time for decisions	(4)
Too much communication between villages	(3)
Too little communication between villages	(1)
Inability to assassinate individuals	(1)
"Assumption that economics and ideology are irrelevant"	(1)
Inability of villagers to fight on their own as effectively as belligerents	(1)
Dealings between government and villagers	(1)

7. Involvement:

High	(17) (officers 4, cadets 13)
Moderate	(3) (officers 2, cadets 1)
Low	(3) (officers 3)

8. Length of game:

Too short	(12) (officers 3, cadets 9)
About right	(13) (officers 6, cadets 7)
Too long	(0)

9. Complexity:

Too complex	(0)
About right	(22) (officers 7, cadets 15)
Too simple	(2) (officers 2)

10. Team Size:

Too few	(4) (cadets 4)
About right	(20) (officers 9, cadets 11)
Too many	(0)

11. Times to be played:

Once	(0)
Three times	(14) (officers 8, cadets 6)
Ten times	(10) (officers 1, cadets 9)
Thirty times	(1) (cadets 1)

12. Most confusing aspect:

Rules	(8)
Message security	(2)
Nothing	(2)
Briefing	(1)
Strict bipolarity	(1)
Impressment	(1)
Kill ratios	(1)

13. Those who would learn most from game:

All those concerned with the problem of insurgency	(5)
Students	(4)
Field grade officers	(1)
Special Forces	(2)
Politicians	(2)
No one	(1)

14. Lessons to be learned from the game:

Decision between alternative strategies	(3)
Complexity of total situation	(2)
Human factors	(2)
Communications problem	(1)
Political factors	(1)
Nothing	(1)

15. Comparison with other training techniques:

Better	(20) (officers 7, cadets 13)
Same	(0)
Worse	(1) (officers 1)
Don't know	(4) (officers 1, cadets 3)

16. Comparison with other research techniques:

Better	(7) (officers 1, cadets 6)
Same	(2) (officers 1, cadets 1)
Worse	(3) (officers 3)
Don't know/problematical	(13) (officers 4, cadets 9)

17. Suggested improvements included:

- Leave gap between cycles to permit time for planning. (3)
- Make reconnaissance less "expensive".
- Chief of winning belligerent should give bonus to or declare winning village.
- More time before the game should be allowed for planning.

The general picture emerging from the critiques is one of satisfaction with or enthusiasm for the AGILE-COIN game. Only one respondent (an officer) was clearly dissatisfied with the whole exercise.

There was considerable agreement about the realistic aspects of the game, with over half the respondents mentioning "uncertainty" or "pressures and demands by belligerents". In commenting on unreal aspects there was a wider range of answers, but four respondents mentioned the lack of time to plan strategy during the game. One respondent apparently thought that the designers assumed economics and ideology to be irrelevant, which indicates a faulty briefing (though no other respondents seem to have shared his impression).

The cadets were on the average more involved than the officers, with 13 out of the 14 cadets reporting themselves highly involved. The officers were spread over the scale, 4 reporting high involvement; 2 moderate; and 3 low. Two-thirds of the officers thought the game about right in length, while over half the cadets thought it too short; no one found it too long. All the cadets and most of the officers judged the level of complexity about right, but two officers thought it too simple. On the other hand, all the officers and most of the cadets found the team size to be about right, while four cadets considered it too small.

No one felt the game should only be played once to be an effective training device. Eight out of nine officers thought three times would be enough as did 6 out of 16 cadets. All but one of the remaining cadets, and the other officer suggested it be played ten times, and the one cadet unaccounted for opted for thirty times.

Obviously, the most confusing aspect of the exercise was the rules, though there was little indication of what specifically had confused the respondents. One interpretation of this response might be that the participants were confused by the situation (an aspect which they found to be realistic), and naturally turned for clarification to the rules as being their only frame of reference, but where little help could be found. The fact that the situation was unfamiliar and therefore confusing was an important reason for playing the game in the first place. Be that as it may, half the respondents to this question cited the rules as the most confusing element. Other more specific problems arose over the questions of message security, impressment, and the kill ratios used.

Responses to the question about who would learn most from the game do not reveal any points of great interest, though it is perhaps worth noting that the response "students" should be taken in the context of a military academy, rather than as meaning students in general.

Lessons which might be learned from repeated plays of the game included decision-making between alternative strategies, the complexity of the total situation, human and political factors, and the importance of effective communications.

In comparing the game with other training techniques, 20 out of 21 respondents who made the comparison thought the game better. The 4 don't knows included 1 officer and 3 cadets. Only 12 respondents were prepared to make a comparison between the game and other research techniques; 3 officers thought it worse, 1 thought it about the same, and 1 thought it better, while 6 out of 7 cadets thought it better.

Most of the suggested improvements were related to criticisms already mentioned (for example, permit time between cycles for strategy planning), but one novel suggestion was forthcoming. The winning belligerent should be able to reward the village of its choice, or possibly declare the winning village, at the end of the game, thus involving the fate of the villages much more effectively with that of the belligerents.

AGILE-COIN DEMONSTRATION EXERCISE #6

U.S. Naval Post-Graduate School, Monterey, California
February 23-25, 1966

A. Summary, Game 1

The Insurgents designed their strategy primarily to win the loyalty of the villagers and secondarily to increase their own force size. Whenever possible they attempted to recruit rather than impress, except when they encountered hostile neutrality as in Yellow Village where they impressed fourteen. This infuriated the villagers, who, looking for some reason to support one belligerent or another, began aiding the Government in return for promised protection. The Insurgents' ultimate strategy was to convince the villagers either to defect to their headquarters or to the Government's, which they then planned to take over. (More than likely, this plan would have failed, due to the overwhelming force superiority of the Government.) Severe losses in Yellow Village forced the Insurgents to postpone this plan, and, in fact, turned the game to a near Government victory.

The Government's initial strategy was to develop a security force in each village consisting partly of Government troops and partly of trained villagers. They anticipated returning trained villagers in exchange for new recruits on an even basis, but this was never carried out. An elaborate plan by the Government spy in Insurgent headquarters to subvert a large Insurgent force from headquarters at a particular time was carried out perfectly, however. At the end of the fifth cycle the spy bolted Insurgent headquarters with thirty-four "soldiers". The umpires ruled that this would be counted as a loss for the Insurgents, but not a commensurate gain for the Government. This move was decisive and negated any chance for an Insurgent victory.

B. Village Records

VILLAGE YELLOW

Cycle	1	2	3	4	5	6	7	8
Number Visiting	26	50	17		49			
Group	25			70		31		
Population 25, 25	Ch B C H	Ch B C H	Ch B C H	Ch B C H	Ch B C H	Ch B C H		
Loyalty G, N, I	26 25	17 13 17 17	21 6 25 21	16 20 19	14 11 18	7 5 7		
Who is Winning	N G N N	N G C C	C I	G N	G N	G G G G		
Winner Preference	N I N N	N G N N	N N	N G	G G	G G G		
Expected Game Length	N G N N	N G C N	G N	G N	G G	G G G		
No. Recruited	7 > 8	5 5 5 5	2 5	5 5 5	3 3	5 5 5 17		
No. Impressed		2 2 2 2	2					
No. Killed		1 1 1 1	2					
Who and how many in Ambush					2	21		
Ambush Outcome (all casualties)	G			2 C G	18 G	30 G		
Administrator?	I				- 8			
	V				- 43			
					- 6			
	NO	YES	NO	YES	YES	YES		

COMMENTS: During the first cycle, both belligerents visited Yellow Village with moderate forces of equal size, requesting recruits. Both were unsuccessful. The Insurgents re-entered the village on the following move with a very large force, impressing 8 villagers but neglecting to kill the Government Administrator. The villagers' fear was such that the eloquent speech made by a representative of the Government convinced them to send 20 recruits in return for a small protective force. The Government also gained additional loyalty when, in the next cycle, the Insurgents returned with a moderate force (killing the Administrator) and impressed six more villagers. Loyalties were still divided at this point, possibly because of the Government's failure to return with the promised troops. By the following cycle, they had fulfilled their pledge and successfully surprised a much larger incoming force of Insurgents on the following move. Heavy Insurgent losses in this village disastrously weakened their force and eliminated the possibility of their victory. By the final cycle of the game, the village was solidly backing the Government, and one villager had deserted to Government headquarters with his family, despite protests from other villagers.

VILLAGE ORANGE

Cycle	1	2	3	4	5	6	7	8
Number	25				25			
Visiting	G							
Group	50	23	50	50	25	25		
Population	20, 20, 20							
Loyalty	G, N, I							
Who is Winning								
Winner Preference								
Expected Game Length	5	3	4	2	2	2	2	2
No. Recruited								
No. Impressed								
No. Killed								
Who and how many in Ambush	10	G						
Ambush Outcome								
casualties								
Administrator?								

COMMENTS: Before action began in Orange village, the villagers decided to plan a strategy which would minimize their losses to impressment and crossfire. They bargained with both Insurgent and Government forces in the first move, offering to each a reliable source of intelligence data in exchange for being left alone. The Insurgent envoy was willing to discuss this with his Chief, but the Government, immediately dubious, left a small garrison as a test of loyalty. This was withdrawn during the second cycle at the request of the village chief, who then offered 10 recruits as compensation. The Insurgents re-entered the village, killing the Government Administrator, and attempted unsuccessfully to recruit. The Government returned, replaced the administrator, and was able to recruit 5 villagers. This was due partly to the successful propagandizing on the part of the Government spy who came to tell the villagers that he had been an Insurgent but had seen the light and was not loyally supporting the Government. Although the village chief was theoretically a spy for the Insurgents, his only communication to them was a note advising that they visit the village during every cycle. In the last cycle of the game the Insurgents entered, desperate for troops and tried to recruit. They unfortunately admitted their weakness and their disastrous defeat in Yellow Village, causing the villagers, including the Insurgent spy, to give solid support to the Government. The villagers' strategy was quite successful, and the village finished with the largest remaining population of all.

VILLAGE GREEN

VILLAGE GREEN									
Cycle	1	2	3	4	5	6	7	8	
Number Visiting	25				50				
Group	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V	P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V P A F R V
Population 20, 20, 20	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20	20 20 20	
Loyalty G, N, I	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	
Who is Winning	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	
Winner Preference	N N N	N N N	N N N	N N N	N N N	N N N	N N N	N N N	
Expected Game Length	25	25	25	25	25	25	25	25	
No. Recruited									
No. Impressed									
No. Killed									
Who and how many in Ambush	10 G	2	50 G	20 G					
Ambush Outcome (all casualties)									
Administrator?	YES	YES	YES	YES	YES	YES	YES	YES	

2-67

COMMENTS: Both belligerent teams carried out their recruitment campaigns in Green Village at the beginning of the game, but met with no success. In the second cycle three villagers had to leave the game and took most of their populations with them, leaving the village with only 45 people. This did not seem to inhibit further attempts at recruitment by the belligerents, who succeeded in obtaining in total 36 recruits. A decisive victory for the Insurgents in cycle 5, plus their abduction of the village chief, demonstrated enough power to get 22 recruits, possibly under the threat of impressing even more.

At the end of the game, the entire village (now reconstituted) perceived the Government to be winning, although actually loyalties were half for the Government and half neutral.

VILLAGE BROWN

Cycle	1	2	3	4	5	6	7	8
Number Visiting	I 25	G 25	50	53	4	4		
Group	AIDHLR	AIDHLR	ABHLCR	WUHLR	RAQHLCR	ABHLR		
Population 20, 20, 20	20 20 20	18 15 17	16 17 19	14 15 13 15	11 15 13 15	13 14 13 15		
Loyalty G, N, I	N N N	I N I	I I N	I N I	I I N	I I I		
Who is Winning	N N N	I I I	I I I	I I I	I I I	I I I		
Winner Preference	N N N	I I I	I I I	I I I	I I I	I I I		
Expected Game Length	14 7 12 10	6 10 8 10	5 9 7	4 8 6	8 7 3	2 5 1		
No. Recruited						1 1		
No. Impressed		7	4 2 6 2					
No. Killed		2 2		6 1 0 2				
Who and how many in Ambush	11 G		30 G					
Ambush Outcome (all casualties)		- 2		- 2 4				
Administrator?	N	- 5		- 5				
	N	N	N	N	N	N	N	N

COMMENTS: Early attempts at recruitment by both belligerents also failed in Brown Village. Heavy-handed tactics on the part of the Government caused some initial dissatisfaction with its cause which was heightened in the course of the game by two Insurgent victories. The presence of an active, yet undetected Insurgent spy in the village enhanced the Insurgents' intelligence and allowed them to surprise the garrisoned Government troops. His persuasiveness, combined with the Insurgents' show of strength here, made this a loyal Insurgent village by the end of the game.

C. Summary, Game 2

The Insurgents interpreted their mission as a peaceful one in which they gradually won the loyalty of the villagers by offering them more long term gains and not forcing their allegiance through fear. Although they had spies in one village and in Government headquarters, they did not rely on them for intelligence information. They acted quickly, leaving two substantial ambushes in the first cycle, which caused the Government to lose 40% of its original force. At the beginning of the second cycle the Insurgents attacked the weakened Government at their headquarters with their full force. Due to their initial miscalculation of the Government's force size, the Insurgents did not have the advantage they had anticipated. The sides were evenly matched (101 Government vs. 100 Insurgents), and both teams suffered disastrous losses. There were only 22 Government survivors and 21 Insurgent survivors.

The Government's initial losses required that they revise their original policy of outright protection to one in which recruitment was foremost. As the recruits were trained, they would have been returned to the villages under the leadership of the few remaining cadre. Recognition of the Government's weakness was so widespread that they were unable to recruit a single villager and they were not strong enough to impress significantly.

Had the Insurgents been able to increase their own original force size it would have been a decisive victory for them. They were able to add 67 cadre to their depleted force, however, and it seems certain that they would have won within the next two or three cycles.

D. Village Records

VILLAGE ORANGE

Cycle	1	2	3	4	5	6	7	8
Number Visiting			2					
Group	S H R T	S H R T	S H R T	S H R T	S H R T			
Population 25, 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25			
Loyalty G, N, I	N N N N	N N N N	N N N N	N N N N	N N N N			
Who is Winning	N I N N	I I N N	I I N N	I I N N	I I N N			
Winner Preference	N I N N	I I N N	I I N N	I I N N	I I N N			
Expected Game Length	10 15 ?	8 5 ?	6 5 ?	4 6 ?	4 6 ?			
No. Recruited								
No. Impressed								
No. Killed								
Who and how many in Ambush								
Ambush Out-								
come (all I					-1 G			
casualties)								
Administrator?	YES	YES	YES	YES	-2 V			
					YES			

COMMENTS: Orange Village was ignored during the first two cycles of the game. At the beginning of the third cycle, the Insurgents entered expounding a policy of self-help in which recruits would be trained by the Insurgents and returned for whatever purpose the village leaders wished. The villagers were not convinced, and the Insurgents left empty-handed. The villagers were not visited again until the end of the game when a single government man entered dragging an Insurgent spy behind. The spy was murdered in the presence of the villagers, and two villagers were also killed. This strategy was an attempt to frighten the villagers into submission, but they retaliated by turning against the government and shooting the government leader. Had the game continued even one more cycle, loyalty reports indicate that this village would have been loyal to the Insurgents. Being ignored, the village finished the game with negligible losses.

VILLAGE YELLOW

Cycle	1	2	3	4	5	6	7	8
Number Visiting	30	5	1	1				
Group	W C P	W C P	W C P	W C P	W C P			
Population	30 30 30	30 30 30	30 30 30	30 30 30	30 30 30			
Loyalty G, N, I	N N N	N N N	N N N	N N N	N N N			
Who is Winning	N I N	N I N	N I N	N I N	N I N			
Winner Preference	N N N	N N N	N N N	N N N	N N N			
Expected Game Length	6 8 ?	3 4 ?	4 5 ?	4 5 ?	4 5 ?			
No. Recruited								
No. Impressed								
No. Killed	1 1 1							
Who and how many in Ambush	30 I							
Ambush Out-	G							
come (all casualties)	I							
Administrator?	V							

COMMENTS: Government forces were surprised by an Insurgent ambush in Yellow Village during the first cycle. Although Government losses were severe, and there was some feeling on the part of the villagers that the Insurgents might be winning, this village remained neutral through three cycles of the game. When the villagers received word that the Government had also lost a battle in Brown Village, they interpreted it as an indication that the Insurgents were winning. In the last cycle the Government visited with a very small force and admitted their weakness. When their plea for recruits failed, they tried to impress and kill villagers. The villagers resisted, and two government men were killed in the skirmish. The only village losses occurred during the first cycle from belligerent crossfire, and the village was able to prevent any recruitment or impressment by either force.

VILLAGE GREEN

Cycle	1	2	3	4	5	6	7	8
Number Visiting	30			32				
Group	C B H R S	C B H R S	C B H R S	C B H R S	C B H R S			
Population	30	30	30	30	30			
Loyalty G, N, I	A A A A A	A A A A A	A A A A A	A A A A A	A A A A A			
Who is Winning	I I I I I	I I I I I	I I I I I	I I I I I	I I I I I			
Winner Preference	I A A A A	I A A A A	I A A A A	I A A A A	I A A A A			
Expected Game Length	7 7 8	7 7 7	7 7 7	7 7 7	7 7 7			
No. Recruited	19							
No. Impressed		2						
No. Killed		6						
Who and how many in Ambush								
Ambush Outcome (all casualties)		-1						
Administrator?	Y	Y						

COMMENTS: In their initial attempt at recruiting in Green Village, the Insurgents were able to get 19 men, from their spy posing as a villager, on the promise that the recruits would be returned when trained. The spy's propaganda, combined with the Insurgents' news that they had won two engagements in other villages, convinced Green that the Insurgents were winning. This perception was unchanged throughout the game. When the Government arrived during the following cycle, with the intention of impressing villagers, the villagers countered by shooting the Government Administrator. Green Village was not visited again in the game, except by the Insurgents who returned their 16 trained men as promised. This brought one more villager to the Insurgent cause and the last neutral faction followed before the game ended, making the village a solid Insurgent stronghold.

VILLAGE BROWN		1	2	3	4	5	6	7	8
Cycle									
Number Visiting Group	I G	30 60	1		1120 recruits	1			
Population		60							
Loyalty G, N, I		23 35 13 36	13 6 11	13 11 11	16 18 16 16	34 16 16			
Who is Winning		I I I I	I I I I	I I I I	I I I I	I I I I			
Winner Preference		I I I I	I I I I	I I I I	I I I I	I I I I			
Expected Game Length		4 2 2 4	5 2 2 2	4 1 1 2	3 1 1 2	2 3 3 3			
No. Recruited									
No. Impressed									
No. Killed		2	7 2						
Who and how many in Ambush		36 1							
Ambush Outcome (all casualties)	G I V	- 48 - 11 - 11							
Administrator?									

COMMENTS: The Government's most disastrous defeat of the game occurred in Brown Village on the first cycle. It was a large and decisive engagement in which the government lost 25% of the original force, the Insurgents 9% and 11 villagers were killed in the crossfire. The villagers interpreted this victory as superior Insurgent force and demonstrated complete Insurgent loyalty from the first cycle through the end of the game. In addition, an Insurgent spy planted as a villager constantly kept the Insurgents informed of the villager actions and attitudes and made policy suggestions. In the fourth cycle, 20 recruits were returned, as promised, thereby confirming Insurgent loyalty in this village.

E. Summary, Game 3

The Insurgents chose to avoid using terror tactics against the villagers in lieu of a more persuasive strategy. Their recruitment campaign was extremely successful, especially in Blue Village, and through the course of the game they were able to get 65 volunteers. This was particularly important after their severe losses in Yellow (cycle 2) and White (cycle 4). At the end of the exercise the Insurgents had the loyalty of almost two-thirds of the villagers. This was not due as much to an effective use of spies or decisive military victories as to their recognition of the need to deal honestly with the villagers and to fulfill their promises whenever possible. Trained recruits were returned to the villages whenever possible, convincing many of the villagers that the Insurgents could be trusted and that they were winning the war.

The Government also attempted a policy of benevolence, although village records indicate a resentment of Government hostility. Unable to recruit volunteers, they were forced to impress more heavily than did the Insurgents.

The one Insurgent spy in their midst caused little or no damage because he could not communicate with the Insurgents. Toward the end of the game the Government decided to punish those villages that indicated disloyalty and force them, by fear, to support them. Their impressment of 32 White villagers backfired completely, and the villagers became more hostile than ever. However, the ultimatum delivered in Yellow village, to be loyal or be eliminated, did create the impression that the Government was winning and did win the loyalty of one more faction, while driving the villagers into the hills for safety. This may indicate that the success of terrorist techniques in winning the loyalty of villagers may depend on the degree of commitment of the villagers, their general predisposition toward both belligerents, and the point at which such action is taken.

F. Village Records

VILLAGE ORANGE

Cycle	1	2	3	4	5	6	7	8
Number Visiting	36	1	20	22	1	1		
Group	2			46				
Population 20, 20, 20, 20, 20	Gr Sn Co B. W	Gr Sn Co B. W	Gr Sn Co B. W	Gr Sn Co B. W	Gr Sn Co B. W	Gr Sn Co B. W	Gr Sn Co B. W	Gr Sn Co B. W
Loyalty G, N, I	20 10 20 20 20	16 16 16 16 16	16 16 16 16 16	16 16 16 16 16	16 16 16 16 16	16 16 16 16 16	16 16 16 16 16	16 16 16 16 16
Who is Winning	N N N N N	N N N N N	N N N N N	N N N N N	N N N N N	N N N N N	N N N N N	N N N N N
Winner Preference	G I I I I	I I I I I	I I I I I	I I I I I	I I I I I	I I I I I	I I I I I	I I I I I
Expected Game Length	5 5 5 5 5	4 4 4 4 4	3 3 3 3 3	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2	2 2 2 2 2
No. Recruited		3		2				
No. Impressed		2		2				
No. Killed		2		2				
Who and how many in Ambush	86 I							
Ambush Outcome (all casualties)	G - 2 + 8000 I - 0 V - 0							
Administrator?	KILLED KILLED KILLED KILLED KILLED KILLED KILLED KILLED	KILLED KILLED KILLED KILLED KILLED KILLED KILLED KILLED	KILLED KILLED KILLED KILLED KILLED KILLED KILLED KILLED	KILLED KILLED KILLED KILLED KILLED KILLED KILLED KILLED	KILLED KILLED KILLED KILLED KILLED KILLED KILLED KILLED	KILLED KILLED KILLED KILLED KILLED KILLED KILLED KILLED	KILLED KILLED KILLED KILLED KILLED KILLED KILLED KILLED	KILLED KILLED KILLED KILLED KILLED KILLED KILLED KILLED

COMMENTS: The Insurgents visited the village at the beginning of the game, making an eloquent case for their cause. Although unable to recruit, they left a moderately large ambush which caught two Government goodwill envoys by surprise on the next move. When the Insurgents revisited, again attempting to recruit, they told the villagers that they had a Government spy in their midst. Believing them, the villagers became immediately suspicious of one another. Before leaving they impressed 10 men and removed their ambush. Both Government and Insurgent forces were recruited successfully on subsequent moves. Government loyalty shifted to neutrality as the Insurgents returned 8 recruits, as promised. One villager (Shelton) whose loyalty had switched from neutral to Government and back to neutral, returned from a visit to Insurgent Headquarters where he had received the impression that the Insurgents were winning. Once this was communicated the entire village was convinced and gave the Insurgents solid backing.

VILLAGE Yellow									
Cycle	1	2	3	4	5	6	7	8	
Number Visiting	31	1	1	1	1	1	1	1	
Group	I	G							
Population	20, 20, 20	20, 20, 20	20, 20, 20	20, 20, 20	20, 20, 20	20, 20, 20	20, 20, 20	20, 20, 20	
Loyalty	G, N, I	G, N, I	G, N, I	G, N, I	G, N, I	G, N, I	G, N, I	G, N, I	
Who is Winning	G	I	G	G	G	G	G	G	
Winner Preference	N	I	G	G	G	G	G	G	
Expected Game Length	3	7	7	7	7	7	7	7	
No. Recruited									
No. Impressed									
No. Killed									
Who and how many in Ambush	3 I								
Ambush Outcome (all casualties)	G	I							
Administrator?	KILLED	YES	NO	YES	NO	YES	NO	YES	

COMMENT'S: Yellow Village harbored both an Insurgent and a Government spy. On the first cycle the Insurgents entered, belligerent and threatening, and left a fairly large ambush. This was immediately reported to the Government who then counterambushed with an overwhelming force. The Government victory produced little change in village loyalties, affecting the vote of only one man who had been learning toward the Government anyway. This may have been due to the resentment against the Government Administrator who was shot by the villagers after the attack. Before the Government left, however, the villagers agreed to remain loyal to the Government and inform them of all ambushes, provided no Government troops were left behind. In the last cycle a new government Administrator entered with an ultimatum: Either the villagers join their forces or be eliminated. The Government left behind 95 garrisoned troops and the villagers, fearing for their lives, abandoned the village and took to the hills.

VILLAGE Green									
Cycle	1	2	3	4	5	6	7	8	
Number Visiting	20	1	15	1	1	1			
Group	P D K G M	P D K G M	P D K G M	P D K G M	P D K G M	P D K G M			
Population 20, 20, 20, 20	20 20 20 20	20 20 20 20	20 20 20 20	20 20 20 20	20 20 20 20	20 20 20 20			
Loyalty G, N, I	N N N I	N N N I	N N N I	N N N I	N N N I	N N N I			
Who is Winning	N N G N	N N G N	N N G N	N N G N	N N G N	N N G N			
Winner Preference	G N G G	G N G G	G N G G	G N G G	G N G G	G N G G			
Expected Game Length	7 5 7 7	6 7 4 6	7 3 5 3	7 2 4 3	7 2 3 2	7 2 3 2			
No. Recruited									
No. Impressed									
No. Killed									
Who and how many in Ambush									
Ambush Out-	-1 (BPT)	-1 (BPT)	-1 (BPT)	-1 (BPT)	-1 (BPT)	-1 (BPT)			
come (all casualties)	I								
Administrator?	Killed 400	NB 400	NB 400	NB 400	NB 400	NB 400			

COMMENTS: There was very little activity in Green Village. The Insurgents visited during each of the first four cycles and shot the Government Administrator, but left no ambushes and took no recruits. The Insurgent Spy in the village was virtually ineffectual and his communications with the Insurgent Chief indicate that only information on population size was reported. In the last cycle the Insurgents recruited five men, the only village losses, whom they did not have time to train. Except for the spy, all villagers were neutral at the end of the exercise.

VILLAGE BROWN

Cycle	1	2	3	4	5	6	7	8
Number Visiting	6	1	12	45	1	1		
Group	G H I K P	C H I K P	C H I K P	C H I K P	C H I K P	C H I K P		
Population 20, 20, 20, 20	20 20 20 20	20 20 20 20	20 20 20 20	20 20 20 20	20 20 20 20	20 20 20 20		
Loyalty G, N, I	I N N N	N N N N	N N N N	N N N N	N N N N	N N N N		
Who is Winning	G N G N	I G N I	N N N N	N N N N	N N N N	N N N N		
Winner Preference	I N N N	N N N N	N N N N	N N N N	N N N N	N N N N		
Expected Game Length	10	10	10	10	10	10		
No. Recruited	5	5	5	5	5	5		
No. Impressed								
No. Killed								
Who and how many in Ambush				4 4 4 4				
Ambush Outcome (all casualties)			50 G--2					
Administrator?	YES	NO	YES	YES	NO	NO		

COMMENTS: Brown Village was visited by small forces until the third cycle when the Government left an ambush of 50. A villager with Insurgent loyalty informed the Insurgents of the ambush and they surprised the Government force on the next move, killing 30. The villagers' perception of Insurgent strength plus their loss of 17 men from cross-fire, turned their loyalty toward the Insurgents. The Government's impressment of fourteen men from the man they suspected of being a spy (he was not officially) irritated them even more, and by the end of the game they were a solidly Insurgent village.

VILLAGE WHITE

Cycle	1	2	3	4	5	6	7	8
Number Visiting	1	1	1	25	1			
Group	S L G I	S L G I	S L G I	S L G I	S L G I	S L G I		
Population 25, 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25	25 25 25 25		
Loyalty G, N, I	N N N N	N N N N	N N N N	N N N N	N N N N	N N N N		
Who is Winning	G N N N	G N N N	G N N N	G N N N	G N N N	G N N N		
Winner Preference	N N N N	N N N N	N N N N	N N N N	N N N N	N N N N		
Expected Game Length	20 25 25 25	20 25 25 25	20 25 25 25	20 25 25 25	20 25 25 25	20 25 25 25		
No. Recruited								
No. Impressed								
No. Killed								
Who and how many in Ambush			35 G	3 3 3 3				
Ambush Outcome (all casualties)				-14				
Administrator?				-20				
				-12				
				YES	YES	YES	YES	YES

COMMENTS: The Insurgents entered this entirely neutral village requesting volunteers and promising to leave their ambush in another village if the villagers would support them. It was an excellent strategy, but the villagers were unwilling to commit themselves. Two chiefs had been replaced and the village was still neutral when the Government entered with a large force and left an ambush of 35. The Insurgents were defeated when they entered the village on the following move, and the government removed their survivors. As the Insurgent threat increased, the Government's call for troops became more urgent, but met with failure here. The villagers began resenting the demands of the Administrator and shot him. When the Government visited in the last move they impressed 32 villagers, probably as a reprisal for the death of the Administrator. This infuriated the villagers, who, with the exception of one faction, shifted their loyalty to the Insurgents. The one neutral acknowledged that he had wavered between neutrality and Insurgent loyalty, and indicated that he wanted to wait one more cycle before supporting the Insurgents.

VILLAGE BLUE		1	2	3	4	5	6	7	8
Cycle									
Number Visiting	I	6	35	2	2	48			
Group	G	82			40				
Population		123456789101112131415161718192021222324252627282930313233343536373839404142434445464748495051525354555657585960616263646566676869707172737475767778798081828384858687888990919293949596979899100							
Loyalty G, N, I									
Who is Winning									
Winner Preference									
Expected Game Length									
No. Recruited									
No. Impressed									
No. Killed									
Who and how many in Ambush		26 G				41 I			
Ambush Outcome (all casualties)			-16						
Administrator?			-2						
		KILLED	YES	NO	NO	YES	NO		

COMMENTS: The Government's belligerent approach toward Blue Village and the ambush they left behind caused immediate resentment here, and half the village favored the Insurgents by the end of the first cycle. The Insurgents routed the Government forces on the next move and successfully recruited 27 villagers before leaving. An argument developed between the chief and a villager which resulted in the villager being shot. In the next cycle the Government returned six of the men they had impressed, but it was not enough to influence village loyalty. The insurgents also returned 6 trained villagers, and 5 more in the following cycle as promised, and thereby succeeded in recruiting 28 volunteers before the end of the game. The Insurgents' ability to keep their word inspired confidence and loyalty among the villagers, making Blue Village another Insurgent stronghold.

G. Summary of Critiques (Games 1, 2, 3)

Numbers on left refer to question numbers on critique form.

Numbers in brackets indicate number of responses of that type. There were a total of 87 respondents.

2. Most realistic aspect:

Uncertainty	(17)
Pressures and demands of belligerents	(17)
Terror and intrigue	(4)
Problem of interpreting intelligence	(8)
Volatility of events	(5)
Competition and cooperation among groups	(12)
NA	(24)

3. Most unrealistic aspect:

Too little time for decisions	(17)
Too much communication between villages	(11)
Too little communication between villages	(5)
Inability to assassinate individuals	(1)
"Assumption that economics and ideology are irrelevant"	(8)
Inability of villagers to fight on their own as effectively as belligerents	(2)
Dealings between government and villagers	(3)
NA	(40)

7. Involvement:

High	(41)
Moderate	(14)
Low	(24)
NA	(8)

8. Length of game:

Too short	(40)
About right	(46)
Too long	(1)
NA	(0)

9. Complexity:

Too complex	(3)
About right	(77)
Too simple	(5)
NA	(2)

10. Team Size:

Too few	(9)
About right	(75)
Too many	(3)
NA	(0)

11. Times to be played:

Once	(6)
Three times	(53)
Ten times	(20)
Thirty times	(2)
NA	(6)

12. Most confusing aspect:

Rules	(39)
Message security	(8)
Nothing	(8)
Briefing	(2)
Strict bipolarity	(0)
Impressment	(2)
Kill ratios	(0)
NA	(28)

13. Those who would learn the most from game:

All of those concerned with the problem of insurgency	(28)
Students	(3)
Field grade officers	(17)
Special Forces	(6)
Politicians	(6)
No one	(3)
NA	(24)

14. Lessons to be learned from the game:

Decision between alternative strategies	(29)
Complexity of total situation	(13)
Human factors	(18)
Communications problem	(1)
Political	(3)
Nothing	(6)
NA	(17)

15. Comparison with other training techniques:

Better	(51)
Same	(7)
Worse	(4)
Don't know	(25)

16. Comparison with other research techniques:

Better	(22)
Same	(6)
Worse	(10)
Don't know/ problematical	(49)

Unclassified

Security Classification

DOCUMENT CONTROL DATA - R&D		
<i>(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)</i>		
1. ORIGINATING ACTIVITY <i>(Corporate author)</i> Abt Associates, Inc. 14 Concord Lane Cambridge, Massachusetts		2a. REPORT SECURITY CLASSIFICATION Unclassified
		2b. GROUP N/A
3. REPORT TITLE Six Demonstrations of the AGILE/COIN Game		
4. DESCRIPTIVE NOTES <i>(Type of report and inclusive dates)</i> Study		
5. AUTHOR(S) <i>(Last name, first name, initial)</i>		
6. REPORT DATE October 1966	7a. TOTAL NO. OF PAGES 128	7b. NO. OF REFS
8a. CONTRACT OR GRANT NO. DA-49-083-OSA-3062	9a. ORIGINATOR'S REPORT NUMBER(S) None	
b. PROJECT NO. ARPA Order 681		
c.	9b. OTHER REPORT NO(S) <i>(Any other numbers that may be assigned this report)</i>	
d.	None	
10. AVAILABILITY/LIMITATION NOTICES Distribution of this document is Unlimited		
11. SUPPLEMENTARY NOTES See Report AD 475846	12. SPONSORING MILITARY ACTIVITY Advanced Research Projects Agency	
13. ABSTRACT This report presents Six demonstratons of the AGILE Counterinsurgency Game.		

DD FORM 1473
1 JAN 64

Unclassified

Security Classification

Unclassified

Security Classification

14. KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
Gaming Counterinsurgency Agile						

INSTRUCTIONS

1. **ORIGINATING ACTIVITY:** Enter the name and address of the contractor, subcontractor, grantee, Department of Defense activity or other organization (*corporate author*) issuing the report.

2a. **REPORT SECURITY CLASSIFICATION:** Enter the overall security classification of the report. Indicate whether "Restricted Data" is included. Marking is to be in accordance with appropriate security regulations.

2b. **GROUP:** Automatic downgrading is specified in DoD Directive S200.10 and Armed Forces Industrial Manual. Enter the group number. Also, when applicable, show that optional markings have been used for Group 3 and Group 4 as authorized.

3. **REPORT TITLE:** Enter the complete report title in all capital letters. Titles in all cases should be unclassified. If a meaningful title cannot be selected without classification, show title classification in all capitals in parenthesis immediately following the title.

4. **DESCRIPTIVE NOTES:** If appropriate, enter the type of report, e.g., interim, progress, summary, annual, or final. Give the inclusive dates when a specific reporting period is covered.

5. **AUTHOR(S):** Enter the name(s) of author(s) as shown on or in the report. Enter last name, first name, middle initial. If military, show rank and branch of service. The name of the principal author is an absolute minimum requirement.

6. **REPORT DATE:** Enter the date of the report as day, month, year; or month, year. If more than one date appears on the report, use date of publication.

7a. **TOTAL NUMBER OF PAGES:** The total page count should follow normal pagination procedures, i.e., enter the number of pages containing information.

7b. **NUMBER OF REFERENCES:** Enter the total number of references cited in the report.

8a. **CONTRACT OR GRANT NUMBER:** If appropriate, enter the applicable number of the contract or grant under which the report was written.

8b, 8c, & 8d. **PROJECT NUMBER:** Enter the appropriate military department identification, such as project number, subproject number, system numbers, task number, etc.

9a. **ORIGINATOR'S REPORT NUMBER(S):** Enter the official report number by which the document will be identified and controlled by the originating activity. This number must be unique to this report.

9b. **OTHER REPORT NUMBER(S):** If the report has been assigned any other report numbers (*either by the originator or by the sponsor*), also enter this number(s).

10. **AVAILABILITY/LIMITATION NOTICES:** Enter any limitations on further dissemination of the report, other than those

imposed by security classification, using standard statements such as:

- (1) "Qualified requesters may obtain copies of this report from DDC."
- (2) "Foreign announcement and dissemination of this report by DDC is not authorized."
- (3) "U. S. Government agencies may obtain copies of this report directly from DDC. Other qualified DDC users shall request through _____."
- (4) "U. S. military agencies may obtain copies of this report directly from DDC. Other qualified users shall request through _____."
- (5) "All distribution of this report is controlled. Qualified DDC users shall request through _____."

If the report has been furnished to the Office of Technical Services, Department of Commerce, for sale to the public, indicate this fact and enter the price, if known.

11. **SUPPLEMENTARY NOTES:** Use for additional explanatory notes.

12. **SPONSORING MILITARY ACTIVITY:** Enter the name of the departmental project office or laboratory sponsoring (*paying for*) the research and development. Include address.

13. **ABSTRACT:** Enter an abstract giving a brief and factual summary of the document indicative of the report, even though it may also appear elsewhere in the body of the technical report. If additional space is required, a continuation sheet shall be attached.

It is highly desirable that the abstract of classified reports be unclassified. Each paragraph of the abstract shall end with an indication of the military security classification of the information in the paragraph, represented as (TS), (S), (C), or (U).

There is no limitation on the length of the abstract. However, the suggested length is from 150 to 225 words.

14. **KEY WORDS:** Key words are technically meaningful terms or short phrases that characterize a report and may be used as index entries for cataloging the report. Key words must be selected so that no security classification is required. Identifiers, such as equipment model designation, trade name, military project code name, geographic location, may be used as key words but will be followed by an indication of technical context. The assignment of links, rules, and weights is optional.

Unclassified

Security Classification